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UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Washington, D. C.

HYDROLOGIC STUDIES

COMPILATION OF
RAINFALL AND RUNOFF FROM THE WATERSHEDS
OF THE
SHELBY LOAM AND RELATED SOILS
CONSERVATION EXPERIMENT STATION
BETHANY, MISSOURI
1941

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By
A. W. Zingg
Assistant Agricultural Engineer

Prepared in cooperation
with

The Missouri Agricultural Experiment Station
under the direction of
C. E. Ramser
Chief, Hydrologic Division

Hydrologic Division, Research
SCS-TP-39, Supplement No. 1
October, 1942

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month Jan-Feb-Mar-Apr, 1944

SHEET 1 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project Bethany, Missouri

WATERSHED Pa-A & Pa-C

Storm No.	Date	WATERSHED		RAINFALL						TEMPERATURE (degrees F.)			RUN-OFF				Rainfall Minus Excess (inches)	Run Loss (tons per acre)	Condition of Watershed
		Number	Area (acres)	Gage No.	Begin (hour)	Duration (minutes)	Amount (inches)	MAXIMUM INTENSITY			Maximum	Minimum	Depth (feet)	Amount (inches)	MAXIMUM RATE				
								3 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)					$\frac{X}{Y}$	Time			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	
1	Jan. 1			4	12:00M	580	.81	.11	.30	48								Pa-A. Torped Bluegrass pasture.	
2	6-7			4	2:20P	360	.32	.24	.18	30								Pa-C. Contour furrowed bluegrass pasture.	
3	13-14-15			4	8:30P	1200	.12	.09	.06	52	31							Soil frozen 2 to 5 inches from Jan. 4 to March 1.	
4	16-17			4	1:10P	960	.21	.12	.08	34	20								
5	21			4			.04			42	25								
6	21-22			4	9:00P	670	1.53	.67	.35	42	24								
7	23			4	3:30A	690	.17	.04	.02	30	21								
8	25-26			4	10:30A	640	.12	.08	.04	30	24								
9																			
10	Feb. 12			4			.04			52									
11	12			4			.04			52	39								
12	12-13			4	11:15P	80	.12	.16	.14	52	30								
13	13	Pa-A	2,026	4	5:00A	165	.12	.08	.04	47								Runoff from snow and rains during period of freezing and thawing. Some entention required.	
14	24	Pa-C	1,974	4	5:00A	165	.12	.08	.04	39	22								
15	26			4			Snow			32	20								
16	3			4			Snow			56	28								
17	5-6			4	9:00P	330	.12	.03	.06	51	20								
18	6			4			Snow			44	27								
19	9			4			Snow			47	25								
20	12			4			Snow			41	20								
21	14			4			Rain			47	26								
22	15			4	6:35A	145	.24	.12	.12	45	32							April 11. Grazing with cattle started on all pasture watersheds	
23	Apr. 2			4						57									
24	2			4	10:30P	75	.24	.20	.16	42									
25	6			4			.01			71	38								
26	8	Pa-A	2,026	4	3:12P	318	1.07	.68	.62	55									
27	9	Pa-C	1,974	4	3:12P	318	1.07	.68	.62										
28	9			4			.03												
29	10			4			.01			54	48								
30	13			4			.05			62	40								
31	17			4	7:35P	40	.28	.60	.36	74	56								
32	18	Pa-A	2,026	4	4:13A	84	.57	.99	.62	80									
33	18	Pa-C	1,974	4	4:13A	84	.57	.99	.62	46									
34	19			4	7:15A	30	.13	.26	.26	70	47								

* Silt - box measurement of total runoff

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH May-June, 1941
SHEET 2 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHEDS Pa-A & Pa-C

Project Bethany, Missouri

Storm No.	Date	WATERSHED		RAINFALL				TEMPERATURE (degrees F.)		RUSH-OFF				MANUAL MEASUREMENT (inches)	Gage Type (each per acre)	CONDITION OF WATERSHED
		Number	Area (acres)	Class No.	Runoff (hours)	Duration (minutes)	Amount (inches)	1 minute (inches per hour)	5 minutes (inches per hour)	30 minutes (inches per hour)	Maximum Intensity	Runoff (hours)	Runoff (hours)	Amount (inches)	Time	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
34	May 1			4			.02						No Runoff			
35	1			4	6:40P	70	.18	.24	.16	.14			No Runoff			Runoff from Pa-C to June 9th
36	2			4	3:05P	6	.09	.30	.36	.19			No Runoff			is from concentrating dykes at
37	2			4	5:01P	40	.20	.36	.48	.34			No Runoff			lower edge of area. No runoff
38	3			4			.05						No Runoff			escaped from contour furrows
39	3			4			.08						No Runoff			prior to this date.
40	5			4	1:25P	7	.14	1.56	.56	.29			No Runoff			
41	5			4			.00						No Runoff			
42	5-6			4	9:05P	189	.37	1.44	.61	.30			No Runoff			
43	6			4	5:10P	12	.18	1.80	.72	.36			No Runoff			
44	15			4	7:30P	35	.14	.72	.40	.24			No Runoff			
45	16	Pa-A	2.026	4	2:11A	121	1.06	4.08	2.50	1.32		2:51A	6:20A	.06	1:14	1.00
45	16	Pa-C	1.974	4	2:11A	121	1.06	4.08	2.50	1.32		2:51A	6:20A	.02	0:13	1.04
46	20	Pa-A	2.026	4	6:57P	108	.39	1.44	.60	.50				None		Trace
46	20	Pa-C	1.974	4	6:57P	108	.39	1.44	.60	.50				None		Bluegrass 2 to 6 inches high on both areas.
47				4			.08							None		
48	22	Pa-A	2.026	4	1:31P	235	1.13	1.32	.91	.64		S.B.M. #		.02		
48	22	Pa-C	1.974	4	1:31P	235	1.13	1.32	.91	.64		2:39P	7:30P	.03	0:15	1.11
49				4			.03							No Runoff		Trace
50	30			4			.03							No Runoff		
51	31	Pa-A	2.026	4	11:10A	52	.67	3.12	1.44	1.08		11:34A	2:30P	.01	0:15	Trace
52	31	Pa-A	2.026	4	9:15P	75	.11	.12	.12	.10				None		
51	31	Pa-C	1.974	4	11:10A	52	.67	3.12	1.44	1.08		11:33A	2:30P	.02	0:21	Trace
52	31	Pa-C	1.974	4	9:15P	75	.11	.12	.12	.10				None		
53	June 1			4	10:16A	26	.22	1.58	.75	.44				No Runoff		
54	1			4			.07							No Runoff		
55	2	Pa-A	2.026	4	3:00P	270	1.51	4.10	2.64	1.46		3:06P	10:00P	.23	0:33	1.23
55	2	Pa-C	1.974	4	3:00P	270	1.51	4.10	2.64	1.46		3:04P	10:28P	.16	0:100	1.35
56	3			4	9:35A	75	.08	.24	.16	.10				No Runoff		
57	6			4	8:30A	60	.09	.12	.12	.10				No Runoff		
58	6	Pa-A	2.026	4	5:55P	142	.16	.84	.40	.20				None		
58	6	Pa-C	1.974	4	5:55P	142	.16	.84	.40	.20				None		

45 ft - box measurement of total runoff

MONTHLY PAY-ROLL, 1912

Principles of

DATE	WATERED		RAINFALL					TEMPERATURES (degrees F.)		WIND			REMARKS, WINDS (m.p.h.)	SIZE LOSS (tons per acre)	CONDITION OF WATERED	
	Number	Area (acres)	Days No.	Depth (inches)	Direction	Amount (inches)	Maximum Temperature		Amount (inches)	Direction	Amount (inches)					
							Minimum	Maximum								
Time	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
59	1	Pa-A	2.000	4	9.10A	95	.39	.02	.10	.37	73	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
60	1	Pa-A	2.000	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
61	1	Pa-A	2.000	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
62	1	Pa-A	2.000	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
59	1	Pa-C	1.274	4	9.10A	95	.29	.02	.10	.37	73	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
60	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
61	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
62	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
63	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
64	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
65	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
66	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
67	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
68	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
69	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
70	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
71	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
72	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
73	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
74	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
75	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
76	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
77	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
78	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
79	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
80	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
81	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
82	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
83	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
84	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
85	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
86	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
87	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
88	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
89	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
90	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
91	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
92	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
93	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
94	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
95	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
96	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
97	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
98	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
99	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.
100	1	Pa-C	1.274	4	9.10A	95	.07	.10	.09	.09	69	56	10.15A	12.00P	.22	Pa-A, Pa-C and Pa-C. 611p. Soil very dry and hard, starting to crack.

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHEDS Pa-A & Pa-CProject, Bothany, Missouri

Storm No.	WATERSHED		RAINFALL				MAXIMUM INTENSITY				RUN-OFF				Total Runoff (acre-feet)	Runoff (inches)	Duration (minutes)	Time (hour)	Obs. No.	Area (acres)	Storm Date
	Number	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
96	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
97	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
98	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
99	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
101	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
102	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
103	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
104	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
105	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
106	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
107	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
108	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
109	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
110	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
111	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
112	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
113	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
114	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
115	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
116	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
117	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
118	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
119	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12
120	2	2,006	1215A	270	21	24	16	12	12	12	12	12	12	12	12	12	12	12	12	12	12

*Slit - box measurement of total runoff

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Monticello, N. D.

10 11

Project: Bethany, Missouri

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

WATERSHED Pa-A & Pa-C

SHEET 5 OF 5

SHEET 5

Storm No.	Date	Watershed		Rainfall				Maximum Intensity				Temperature (degrees F.)		Run-off				Rainfall (inches)	Run-off (cfs per acre)	Condition of Watershed
		Number	Area (acres)	Depth (inches)	Duration (minutes)	Amount (inches)	2 estimates (inches per hour)		3 estimates (inches per hour)		Maximum (inches per hour)	Minimum (inches per hour)	Depth (inches)	Amount (cfs per acre)	Redd (cfs per acre)	Paved (cfs per acre)				
							Estimated	Actual	Estimated	Actual										
118	Oct. 26	Pa-C	1,974	4	12105A 300	.13	.72	.32	.20	.20	71									
119	26	Pa-C	1,974	4	6110A 60	.16	.60	.33	.20	.20										
120	26	Pa-C	1,974	4		.04														
121	26			4		.06					54									
122	27			4		.08					65									
123	29			4		.06					47									
124	20, 31, 11/1	Pa-A	2,026	4	8130P 180	1.98	.36	.28	.22	.22	46									
125	20, 31, 11/1	Pa-C	1,974	4	8130P 180	1.98	.36	.28	.22	.22	33									
126	Nov. 4	Pa-A	2,026	4	7110A 125	.22	.24	.12	.12	.12	58									
127	4	Pa-C	1,974	4	7110A 125	.22	.24	.12	.12	.12	35									
128	5			4		.05					33									
129	12	Pa-A	2,026	4	6125A 105	.33	.96	.10	.32	.32	67									
130	12	Pa-C	1,974	4	6125A 105	.33	.96	.10	.32	.32	10									
131	12	Pa-A	2,026	4	2100P 360	.13	.12	.03	.06	.06	54									
132	12	Pa-C	1,974	4		.06					27									
133	12	Pa-A	2,026	4	3130P 180	.04	.96	.56	.36	.36	63									
134	12	Pa-C	1,974	4	3130P 180	.04	.96	.56	.36	.36	52									
135	12	Pa-A	2,026	4	1100A 910	1.12	.94	.16	.16	.16	51									
136	12	Pa-C	1,974	4		.04					51									
137	12	Pa-A	2,026	4	8130P 180	.13	.96	.56	.36	.36	63									
138	12	Pa-C	1,974	4	8130P 180	.13	.96	.56	.36	.36	42									
139	12	Pa-A	2,026	4	3130P 180	.05	.94	.16	.16	.16	51									
140	12	Pa-C	1,974	4		.10					37									
141	12			4		.16					27									
142	12			4		.10					31									
143	12			4		.04					10									
144	12			4		.04					31									
145	12			4		.05					37									
146	12			4		.16					27									
147	12			4		.10					31									
148	12			4		.04					10									
149	12			4		.04					31									
150	12			4		.05					37									
151	12			4		.16					27									
152	12			4		.10					31									
153	12			4		.04					10									
154	12			4		.04					31									
155	12			4		.05					37									
156	12			4		.16					27									
157	12			4		.10					31									
158	12			4		.04					10									
159	12			4		.04					31									
160	12			4		.05					37									
161	12			4		.16					27									
162	12			4		.10					31									
163	12			4		.04					10									
164	12			4		.04					31									
165	12			4		.05					37									
166	12			4		.16					27									
167	12			4		.10					31									
168	12			4		.04					10									
169	12			4		.04					31									
170	12			4		.05					37									
171	12			4		.16					27									
172	12			4		.10					31									
173	12			4		.04					10									
174	12			4		.04					31									
175	12			4		.05					37									
176	12			4		.16					27									
177	12			4		.10					31									
178	12			4		.04					10									
179	12			4		.04					31									
180	12			4		.05					37									
181	12			4		.16					27									
182	12			4		.10					31									
183	12			4		.04					10									
184	12			4		.04					31									
185	12			4		.05					37									
186	12			4		.16					27									
187	12			4		.10					31									
188	12			4		.04					10									
189	12			4		.04					31									
190	12			4		.05					37									
191	12			4		.16					27									
192	12			4		.10					31									
193	12			4		.04					10									
194	12			4		.04					31									
195	12			4		.05					37									
196	12			4		.16					27									
197	12			4		.10					31									
198	12			4		.04					10									
199	12			4		.04					31									
200	12			4		.05					37									
201	12			4		.16					27									
202	12			4		.10					31									
203	12			4		.04					10									
204	12			4		.04					31									
205	12			4		.05					37									
206	12			4		.16					27									
207	12			4		.10					31									
208	12			4		.04					10									
209	12			4		.04					31									
210	12			4		.05					37									
211	12			4		.16					27									
212	12			4		.10					31									
213	12			4		.04					10									
214	12			4		.04					31									
215	12			4		.05					37									
216	12			4		.16					27									
217	12			4		.10					31									

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Moisture Feb-Mar-Apr-May, 1912
SHEET 1 OF 5

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project: Bethany, Missouri

Storm No.	Date	Watershed		Rainfall				Runoff (inches)			Runoff		Rainfall (inches)	Runoff (cubic feet)	Condition of Watershed
		Number	Area (acres)	Peak (hour)	Duration (minutes)	Amount (inches)	44	8 minutes (inches per hour)	16 minutes (inches per hour)	30 minutes (inches per hour)	Depth (feet)	Amount (inches)	Time		
1	Mar. 1	Pt-B	5,563	12:00M	500	.79	.79	.81	.44	.30	.43	.43	.43	.000	Silt not frozen at beginning of year.
2	Mar. 6-7			2:20P	320	.32	.32	.24	.21	.18					
3	Mar. 11-12			8:30P	200	.33	.33	.30	.29	.24					
4	Mar. 13-14			1:10P	900	.33	.33	.31	.30	.23					
5	Mar. 15-16					.04	.04	.04	.03	.03					
6	Mar. 17-18			9:00P	370	.53	.53	.67	.35	.24					
7	Mar. 19-20			2:20A	600	.17	.17	.04	.03	.21					
8	Mar. 21-22			10:30A	840	.22	.22	.12	.08	.04					
9	Mar. 23-24					.04	.04	Rain		.52					
10	Mar. 25-26			11:15P	80	.12	.12	.16	.14	.39					
11	Mar. 27-28			5:00A	165	.10	.10	.08	.04	.30					
12	Mar. 29-30					.07	.07	Snow		.32					
13	Mar. 31-1					.07	.07	Snow		.20					
14	Mar. 2-3					.01	.01	Snow		.23					
15	Mar. 4-5			9:00P	390	.22	.22	.12	.08	.20					
16	Mar. 6-7					.01	.01	Snow		.51					
17	Mar. 8-9					.01	.01	Snow		.44					
18	Mar. 10-11					.05	.05	Snow		.27					
19	Mar. 12-13					.05	.05	Snow		.41					
20	Mar. 14-15			6:35A	115	.16	.16	.10	.06	.32					
21	Mar. 16-17					.30	.30	.24	.20	.57					
22	Mar. 18-19			10:30P	75	.16	.16	.04	.04	.42					
23	Mar. 20-21			3:20P	370	.07	.07	1.00	.60	.38					
24	Mar. 22-23					.01	.01			.50					
25	Mar. 24-25					.01	.01								
26	Mar. 26-27					.01	.01								
27	Mar. 28-29					.01	.01								
28	Mar. 30-31					.01	.01								
29	Mar. 1-2					.01	.01								
30	Mar. 3-4					.01	.01								
31	Mar. 5-6					.01	.01								
32	Mar. 7-8			7:25P	140	.01	.01	.72	.40	.56					
33	Mar. 9-10			4:15P	24	.01	.01	1.56	.60	.43					
34	Mar. 11-12			7:15A	20	.01	.01	.36	.26	.47					
35	Mar. 13-14					.01	.01								
36	Mar. 15-16			6:10P	70	.01	.01	.24	.16	.11					
37	Mar. 17-18			3:00P	6	.01	.01	.09	.36	.57					

* Silt - box measurement of total runoff **Sne note on sheet 5

MONTH May-June, 19 41
SHEET 2 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT Pothoey, Missouri

Form B

Storm No. Date	WATERSHED		Runoff				Transmission (inches)		Retention (hours)		Maximum Rate		Material Stripped (tons per acre)	Condition of Watershed
	Number	Area (acres)	Peak No.	Duration (minutes)	Amount (cubic feet)	Maximum Intensity (Inches per hour)			Minimum	Peak (cubic feet)	Amount (cubic feet)			
						5 minutes (Inches per hour)	15 minutes (Inches per hour)	30 minutes (Inches per hour)			Time	Time		
37 May 2	17-B	5.563												
38 May 3			5:01P	40	.20	.96	.48	.34	81	57		No Runoff		(10)
39 May 3					.05				79			No Runoff	.05	
40 May 3			1:25P	7	.14	1.56	.56	.28	75	61		No Runoff	.08	
41 May 3					.00				50			No Runoff		
42 May 3			9:05P	189	.27	1.44	.61	.30	77	51		No Runoff		
43 May 3					.05							No Runoff	.16	
44 May 3			5:10P	12	.10	1.80	.72	.36	77	54		No Runoff		
45 May 3			7:12P	35	.11	.72	.40	.24	81	63	2:13A	6:00A	.93	Soil dry and cracked before rain of May 16. Bluegrass grazed off to height of 2 to 4 in. Soil is packed by tramping of sheep. Excellent vegetation.
46 May 3			2:11A	121	1.06	4.09	2.50	1.52	57	34		No Runoff	.30	
47 May 3			6:57P	108	.17	1.44	.60	.50	87	62		No Runoff		
48 May 3					.00				84	63	2:43P	7:00P	.04	
49 May 3			1:23P	235	1.33	1.32	.91	.64	85	68		No Runoff	1.07	
50 May 3					.02				89	64		No Runoff	.04	
51 May 3					.03							No Runoff		
52 May 3					.01							No Runoff		
53 May 3			11:10A	52	.67	3.12	1.44	1.08	81	63	11:30A	1:00P	.001	
54 May 3			9:15P	75	.11	.12	.12	.10				No Runoff		
55 May 3					.09							No Runoff		
56 May 3			3:10A	76	.00	1.50	.75	.41	80	65		No Runoff		
57 May 3					.00							No Runoff		
58 May 3			3:00P	2:10	1.31	4.10	2.60	1.56	80	65	3:05P	11:10P	.02	
59 May 3			3:10P		.00	.00	.16	.10	80	63		No Runoff	.02	
60 May 3			11:55A	70	.17	.10	.10	.10	76	64		No Runoff	1.19	
61 May 3			5:10P	17	.20	.30	.10	.10				No Runoff	.00	
62 May 3			3:10A	95	.30	.10	.10	.10	75	65	3:15A	3:15A	.00	Soil wet and bluegrass grazed off to height of 2 to 4 in. Soil is packed by tramping of sheep.
63 May 3			3:10A	70	.07	.10	.10	.10	75	65		No Runoff		
64 May 3			1:10A	329	1.62	4.32	2.80	1.74	69	56	2:00A	2:03P	1.60	
65 May 3			2:10P	265	.03	1.60	1.23	.85	69	56	2:15P	11:10P	.00	
66 May 3					.03							No Runoff	.03	
67 May 3			3:15A	30	.01	.12	.12	.09	63	55		No Runoff	.03	
68 May 3					.07				90	68		No Runoff	.00	
69 May 3			3:15P	75	.01	1.32	.10	.60	97	76		No Runoff	.00	
70 May 3					.07							No Runoff	.00	

See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month July-Aug-Sept., 1941
Station 3 of 5 sheets

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED Pa-B

Project Bathory, Missouri

Storm No.	Date	Watershed		Rainfall		Maximum Intensity		Temperature (degrees F.)		Moisture		Harvest, Moisture (inches)	Soil Loss (tons per acre)	Condition of Watershed
		Number	Area (acres)	Open (inches)	Amount (inches)	Excess (inches per hour)	Deficit (inches per hour)	Maximum	Minimum	Spots (inches)	Amount (inches)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
66	July 2	Pa-B	5,563	12:45P	4.95	.13	.24	.16	.08	60	59	No Runoff		
67	July 2-3			11:30P	6.0	.10	.24	.16	.14	80	59	No Runoff		
68	July 3					.06				74	64	No Runoff		
69	July 7					.04				93	64	No Runoff		
70	July 8					.12		.36	.18	90	65	No Runoff		
71	July 12			7:40P	7.4	.12		.20	.10	92	63	No Runoff		
72	July 21			2:02A	6.6	.11				92	62	No Runoff		
73	July 21					.03				89	63	No Runoff		
74	July 21					.04				103	71	No Runoff		
75	July 21					.07				95	72	No Runoff		
76	July 23					.03						No Runoff		
77	July 26			4:45P	15	.11	.72	.44	.22	91	70	No Runoff		
78	Aug. 5			7:45A	7.0	.25	.72	.40	.24	99	73	No Runoff		
79	Aug. 20					.01				59	74	No Runoff		
80	Aug. 21					.04				93	63	No Runoff		
81	Aug. 21			12:40A	72	.11	.60	.30	.16	84	72	No Runoff		
82	Aug. 22			10:12A	6.0	.02	1.44	.80	.44	95	62	No Runoff		
83	Aug. 22					.01				84	70	No Runoff		
84	Aug. 22			5:40A	6.7	.06	3.25	2.60	1.44	93	74	No Runoff		
85	Sept. 2			8:15A	5.0	.16	.27	.07	.01	84	72	No Runoff		
86	Sept. 2			12:05P	2.5	.03	.65	.06	.26	91	76	No Runoff		
87	Sept. 4					.08				90	64	No Runoff		
88	Sept. 6-7			10:00P	22.0	1.54	3.84	2.80	1.24	84	72	No Runoff		
89	Sept. 7					.02				91	76	No Runoff		
90	Sept. 8					.07				84	72	No Runoff		
91	Sept. 9			12:00A	13.5	.10	.48	.28	.16	72	53	No Runoff		
92	Sept. 9			3:50A	19.5	.20	.24	.16	.16	82	60	No Runoff		
93	Sept. 13			7:50A	11.5	.25	.24	.24	.22	80	66	No Runoff		
94	Sept. 15			6:00A	7.0	.21	.70	.32	.24	82	63	No Runoff		
95	Sept. 15-16			11:00P	26.5	.75	1.44	.88	.76	82	63	No Runoff		

*Correction of .01 omitted.

**See note on Sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Sept-Oct., 19 41

SHEET 4 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED No. 3

Project Bethany, Missouri

Storm No.	Date	WATERSHED		RAINFALL				TEMPERATURE (degrees F.)		RUNOFF			RAINFALL MINOR (inches)	Run Loss (tons per acre)	CONDITION OF WATERSHED
		Number	Area (acres)	Depth (inches)	Direction (minutes)	Time (hour)	Onset No.	Maximum Intensity (inches per hour)	Minimum (inches per hour)	Maximum (inches per hour)	Amount (inches)	Time (hour)			
96	Sept. 27	Pa-3	5,563					.02	.16	.12	No Runoff				
97	28				270	12:15		.24	.12	.12	No Runoff				
98	29							.04			No Runoff				
99	30				275	9:50P		.04	.36	.13	No Runoff				
100								.04	.36	.13	No Runoff				
101	Oct. 2				10	7:00A		.96	.36	.67	None				
102	2				330	11:30A		1.20	.48	.55	None				
103	11							.08		.70	No Runoff				
104	6				75	5:00A		.11	.16	.02	No Runoff				
105	6				25	1:30P		.72	.40	.55	No Runoff				
106	6				85	10:25P		1.40	1.20	.09	No Runoff				
107	9				301	12:11A		3.12	2.32	.57	No Runoff				
108								.65	1.30	.43	No Runoff				
109	13				25	9:30P		2.03	2.03	.53	No Runoff				
110	17				60	3:05A		.24	.20	.16	No Runoff				
111	18				114	2:00A		1.20	.52	.73	None				
112	20							.84	.40	.20	No Runoff				
113	20				12	8:44P		.72	.32	.58	No Runoff				
114	20				22	10:15P		2.36	1.04	.72	No Runoff				
115	21				27	2:23A		1.92	1.22	.64	No Runoff				
116	21				15	11:54A		.72	.32	.71	No Runoff				
117	22							.63	.20	.54	No Runoff				
118	26				300	12:25A		.72	.32	.71	No Runoff				
119	26				60	6:50A		.63	.20	.54	No Runoff				
120	27							.07	.07	.07	No Runoff				

See note on sheet 5

Month Oct-Nov-200. 10 11

Sheet 5 of 5 sheets

Bethany, Missouri

Storm No.	Date	WATERSHED		TRAILFALL		MAXIMUM INTEREST				TEMPERATURE (degrees F)		HOURS OF		Status & Remarks	Amount (inches)	Time	Remarks
		Number	Area (acres)	Time (min)	Amount (inches)	8 minutes (inches per hour)	16 minutes (inches per hour)	30 minutes (inches per hour)	Minimum	Maximum	Hours (hour)	Amount (inches)					
121	Oct. 26	121	5.563														
122	Oct. 27	122															
123	Oct. 29	123															
124	Oct. 31-11/1	124															
125	Nov. 1	125															
126	Nov. 5	126															
127	Nov. 10	127															
128	Nov. 11	128															
129	Nov. 12	129															
130	Nov. 13	130															
131	Nov. 14	131															
132	Nov. 15	132															
133	Nov. 16	133															
1941 Total		R-B 5.563		351.03		Grading Area 7.53 Acres		8.53		10.0		35.57		10.0			

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Monthly Run-Off - Feb-Mar-Apr-May, 1942
SHEET 1 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED D-1

Project Bothany, Missouri

Storm No.	Date	WATERSHED		RAINFALL				TEMPERATURE (degrees F)				RUN-OFF				Rainfall Minus Excess (inches)	Excess (inches)	Condition of Watershed	
		Number	Area (acres)	Gage No.	Run-in (hours)	Duration (minutes)	Amount (inches)	Maximum Intensity			Minimum	Medium	Flood (hours)	Amount (acre-inches)	VARIATION RATE				
								5 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)					EXCESS				Time
1	Jan. 1	2-1	7,510	6	10:00P	500	.72	.84	.74	.50	1.9	31						Waterlogged was released in the fall of 1920. Ground not frozen at start of 1921 calendar year.	
2	1				2:00P	20	.32	.21	.14	.19	30	14							
3	13-14-15				8:20P	1200	.72	.84	.74	.50	32	33							
4	16-17				1:20P	960	.72	.84	.74	.50	34	30							
5	21						.18	Rain		.04	19	25							
6					9:00P	330	.48	1.37	.60	.32	42	21							
7	21-22				5:30A	690	.17	.96	.64	.02	30	21							
8					10:30A	810	.22	.72	.60	.01	30	24							
9																			
10	Feb. 1						.01	Rain			52	39						Runoff from rains and melting snow from Jan. 1 to Feb. 15, 1921.	
11							.04	Rain		.16	52	30						Some estimating required to ascertain amounts of runoff for this year.	
12	1-2				11:15P	90	.32	.21	.14	.19	47	30							
13	1-2				5:00A	165	.10	.32	.20	.01	29	22							
14	1-2						.07	Snow		.03	32	22							
15	1-2						.07	Snow			32	22							
16	Mar. 3				9:00P	390	.01	Snow		.06	56	23						Soil frozen from Jan. 4 to Mar. 1. Freezing occurred only to depths of 2 to 5 inches.	
17	5-6						.02	.12	.03		51	30							
18	6						.01	Snow			44	27							
19	9						.03	Snow			47	26							
20	9						.03	Snow			47	26							
21	14						.05	Rain		.12	47	26							
22	15				6:35A	115	.18	.21	.12	.12	45	32							
23	Apr. 2						.02				57	15						April 2. Surface of flood ground dry at time of storm, Apr. 10.	
24	2				10:30P	75	.15	.21	.15	.13	71	24							
25	2						.03	.06	.03		55	50							
26	2				3:13P	336	.06	1.20	.63	.61	54	50							
27	8						.01				54	50							
28	9						.03				62	46							
29	10						.03				62	46							
30	10						.03				62	46							
31	11				7:35P	110	.05	.96	.60	.36	71	56							
32	11				4:15A	24	.57	1.22	.60	.60	70	56							
33	19				7:35A	30	.11	.36	.02	.02	70	49						April 2. Surface of flood ground dry at time of storm, Apr. 10.	
34							.03				70	49							
35	1				6:10P	70	.02	.01	.02	.11	75	17							
36	1				3:10P	5	.06	.72	.05	.21	56	56							
37	2				5:07P	50	.20	.60	.10	.30	91	57							
							.21				57	57							

**Geo note on sheet 5

10. Attached was placed in the cell of 1200 acres of runoff from at about of 1941 on lower ground.

Runoff from ruins and melting snow from Jan. 1 to Feb. 25, 1942. Some estimating required to ascertain amount of runoff for this period.

Soil frozen from Jan. 1 to Mar. 1. Freezing occurred only to depths of 2 to 5 inches.

Soil. 2. Surface of ground around dry at base of storm.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month May-June-July, 1941

RECORD OF SINGLE STORMS AND THEIR RUNOFFS ON VARIOUS WATERSHEDS

Project Bedford, Missouri

WATERSHED D-1

Sheet 2 OF 5 61178

Storm No.	Date	Watershed		Rainfall					Stream Discharge					Runoff					Condition of Watershed
		Number	Area (acres)	Gage No.	Time of day	Direction of wind	Amount (inches)	24-HOUR DISCHARGE			Maximum	Minimum	Mean (cfs)	Peak (cfs)	Amount (inches)	Time of day	Direction of wind		
								Amount (cfs)	Time of day	Direction of wind									
38	5	3-1	1,230																
39	5																		
40	5																		
41	5																		
42	5																		
43	5																		
44	5																		
45	5																		
46	5																		
47	5																		
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62	5																		
63	5																		
64	5																		
65	5																		
66	5																		
67	5																		
68	5																		
69	5																		

Some data on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month July-Aug-Sept. 1941

SHEET 3 OF 5

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
Watershed No. 1

Watershed No. 1

Storm No.	Date	Watershed			Rainfall			Temperature (F)		Runoff			Thunder Miles (1000)	Runoff (1000 cu ft)	Remarks
		Number	Area (sq. mi.)	Per cent	Time (hr.)	Max. (in.)	Duration (hr.)	Max. (F)	Min. (F)	Max. (in.)	Duration (hr.)	Amount (in.)			
70	July 2	1-1	74520			.12	.12	80	65	No Runoff			(17)	(18)	
71	July 3	1-1	74520			.12	.12	80	65	No Runoff					
72	July 4	1-1	74520			.12	.12	80	65	No Runoff					
73	July 5	1-1	74520			.12	.12	80	65	No Runoff					
74	July 6	1-1	74520			.12	.12	80	65	No Runoff					
75	July 7	1-1	74520			.12	.12	80	65	No Runoff					
76	July 8	1-1	74520			.12	.12	80	65	No Runoff					
77	July 9	1-1	74520			.12	.12	80	65	No Runoff					
78	July 10	1-1	74520			.12	.12	80	65	No Runoff					
79	July 11	1-1	74520			.12	.12	80	65	No Runoff					
80	July 12	1-1	74520			.12	.12	80	65	No Runoff					
81	July 13	1-1	74520			.12	.12	80	65	No Runoff					
82	July 14	1-1	74520			.12	.12	80	65	No Runoff					
83	July 15	1-1	74520			.12	.12	80	65	No Runoff					
84	July 16	1-1	74520			.12	.12	80	65	No Runoff					
85	Sept. 2	1-1	74520			.12	.12	80	65	No Runoff					
86	Sept. 3	1-1	74520			.12	.12	80	65	No Runoff					
87	Sept. 4	1-1	74520			.12	.12	80	65	No Runoff					
88	Sept. 5	1-1	74520			.12	.12	80	65	No Runoff					
89	Sept. 6	1-1	74520			.12	.12	80	65	No Runoff					
90	Sept. 7	1-1	74520			.12	.12	80	65	No Runoff					
91	Sept. 8	1-1	74520			.12	.12	80	65	No Runoff					
92	Sept. 9	1-1	74520			.12	.12	80	65	No Runoff					
93	Sept. 10	1-1	74520			.12	.12	80	65	No Runoff					
94	Sept. 11	1-1	74520			.12	.12	80	65	No Runoff					
95	Sept. 12	1-1	74520			.12	.12	80	65	No Runoff					
96	Sept. 13	1-1	74520			.12	.12	80	65	No Runoff					
97	Sept. 14	1-1	74520			.12	.12	80	65	No Runoff					
98	Sept. 15	1-1	74520			.12	.12	80	65	No Runoff					
99	Sept. 16	1-1	74520			.12	.12	80	65	No Runoff					
100	Sept. 17	1-1	74520			.12	.12	80	65	No Runoff					

See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Sept-Oct. 1942
SHEET 4 OF 5 REPORTS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED 1-1

Province Pathway, Missouri

Storm No.	Date	Watershed		RAINFALL				TEMPERATURE (degrees F.)			Evaporimeter			Maximum Runoff	Minimum Runoff	Remarks
		No. 1	No. 2	Station	Amount (inches)	Duration (hours)	Intensity (inches per hour)	Maximum (11)	Minimum (12)	Average (13)	Actual (14)	Evaporimeter (15)	Runoff (16)			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
99	Sept. 29															
100	Sept. 30															
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**See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Nov. - DAY 10
SHEET 5 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED D-2

Property Botetown, Missouri

Storm No.	Date	Watershed		Basin		Rainfall		Maximum Intensity		Runoff		Remarks		Remarks	Remarks
		Number	Area (Acres)	Basin (Sq. Miles)	Duration (Hrs.)	Amount (Inches)	Duration (Hrs.)	Intensity (Inches per Hour)	Intensity (Inches per Hour)	Amount (Inches)	Duration (Hrs.)	Remarks	Remarks		
125	Nov. 4	1-1	7,510	7,460A	105	.22	.24	.12	.12	.53	35	S. H. H.	.20	.000	Nov. 13-14 Bank down, Yield 7.46 cu./A.
126	5					.05				53	35	No Runoff	.01	.000	
127	19			6125A	105	.14	.96	.40	.36	67	110	S. H. H.	.13	.000	
128	22			2100P	360	.13	.12	.08	.06	54	25	No Runoff	.13		Snow.
129	Dec. 11					.06				27	14	No Runoff	.06		Ice.
130	12					.04				63			.01		Ice.
131	12				8410P	.15	.72	.44	.26	50	50	10:55P	.09	.000	Ice.
132	13			1410A	790	.23	.48	.20	.16	54	51	11:00P	.09	.000	Ice. burned to snow.
133	13					.25				37	30		.05		Ice & Snow.
134	13					.16				27	13	No Runoff	.06		Snow.
135	31					.10				39	19	No Runoff	.10		Snow.
1941 Total		D-1	7,510			35.04							30.01	1.378	

* The difference between the catch in the standard gauge used to determine the amounts of rainfall for a watershed, and the amounts from the recorder on which intensities are based, is indicated by a plus or minus sign.

Amounts from 10% or standard gauge No. 6 plus 60% of standard gauge No. 2.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Monthly Run-off - Mar-Apr-May, 1942

Sheet 1 of 5

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED D-2

Property BETHTANY, MISSOURI

Storm No.	Date	Watershed		Rainfall							Runoff				Notes			
		Number	Area (acres)	Gage No.	Begin (hour)	Duration (minutes)	Amount (inches)	Maximum Intensity			Minimum	Began (hour)	Ended (hour)	Amount (inches)		Maximum Rate (inches per hour)		
								5 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)								
1	Jan. 1	D-2	8,050		12:00P	500	.29	.81	.41	.30	.19	34						Runoff from rains and melting snow from Jan. 1 to Feb. 3 and Some estimating required to ascertain amounts of Runoff for this period.
2	Jan. 1				2:20P	320	.32	.24	.24	.18		30	14					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
3	Jan. 1						.04											
4	Jan. 15				8:30P	1200	.33	.12	.08	.06		52	31					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
5	Jan. 15				1:10P	960	.25	.24	.15	.09		24	24					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
6	Jan. 21						.04	Rain				42	25					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
7	Jan. 21				9:00P	330	.18	1.57	.60	.32		42	24					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
8	Jan. 21				5:30A	600	.17	.09	.01	.01		20	24					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
9	Jan. 21				10:30A	940	.22	.32	.09	.04		30	24					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
10	Feb. 1						.04	Rain				52	39					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
11	Feb. 1						.04	Rain				52	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
12	Feb. 1				11:15P	80	.12	.21	.16	.14		47	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
13	Feb. 1				5:00A	160	.10	.12	.08	.04		39	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
14	Feb. 1						.07	Snow				39	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
15	Feb. 1						.07	Snow				32	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
16	Mar. 1						.03	Snow		.03		54	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
17	Mar. 1				9:00P	300	.03	.12	.03	.06		41	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
18	Mar. 1						.03	Snow				44	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
19	Mar. 1						.03	Snow				47	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
20	Mar. 1						.05	Snow				41	20					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
21	Mar. 1				6:35A	145	.18	.64	.12	.12		45	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
22	Mar. 1						.03					58	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
23	Mar. 1				10:12P	75	.07	.64	.20	.16		40	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
24	Mar. 1				3:12P	316	1.04	1.00	.69	.61		71	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
25	Mar. 1						.03					55	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
26	Mar. 1						.03					50	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
27	Mar. 1						.03					54	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
28	Mar. 1						.05					60	30					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
29	Mar. 1				7:12P	190	.03	.08	.32	.26		80	59					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
30	Mar. 1				4:13P	80	.03	1.00	.80	.20		70	40					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
31	Mar. 1				7:15A	30	.03	.24	.22	.22		70	47					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
32	Mar. 1						.03					75	56					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
33	Mar. 1				6:10P	70	.03	.03	.30	.11		81	57					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
34	Mar. 1				3:20P	5	.03	.03	.04	.12		57	62					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
35	Mar. 1				5:07P	30	.03	.03	.10	.30		70	62					Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
36	Mar. 1						.03											Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
37	Mar. 1						.03											Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
38	Mar. 1						.03											Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
39	Mar. 1						.03											Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.
40	Mar. 1						.03											Soil frozen from Jan 1 to Mar Freezing occurred only to depth of 1 to 3 inches.

9-10-42

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH May-June-July 1944
SHEET 2 of 5

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project Pottery, Missouri

WATERSHED D-C

Storm No.	Date	Watershed		Rainfall		Maximum Forestry			Runoff		Basin		Time		Remarks	Runoff (cu ft)	Remarks
		Area (acres)	Base No.	Depth (inches)	Amount (inches)	Antecedent (inches per hour)	Maximum (inches per hour)	Excess (inches per hour)	Maximum	Minimum	Runoff (cu ft)	End of (inches)	Runoff (inches)	Time (hr:min)			
40	May 1	8,670	1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 1. Discharge, narrow, and drill	10	May 1. Discharge, narrow, and drill
41	May 2		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 2. Discharge, narrow, and drill	10	May 2. Discharge, narrow, and drill
42	May 3		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 3. Discharge, narrow, and drill	10	May 3. Discharge, narrow, and drill
43	May 4		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 4. Discharge, narrow, and drill	10	May 4. Discharge, narrow, and drill
44	May 5		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 5. Discharge, narrow, and drill	10	May 5. Discharge, narrow, and drill
45	May 6		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 6. Discharge, narrow, and drill	10	May 6. Discharge, narrow, and drill
46	May 7		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 7. Discharge, narrow, and drill	10	May 7. Discharge, narrow, and drill
47	May 8		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 8. Discharge, narrow, and drill	10	May 8. Discharge, narrow, and drill
48	May 9		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 9. Discharge, narrow, and drill	10	May 9. Discharge, narrow, and drill
49	May 10		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 10. Discharge, narrow, and drill	10	May 10. Discharge, narrow, and drill
50	May 11		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 11. Discharge, narrow, and drill	10	May 11. Discharge, narrow, and drill
51	May 12		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 12. Discharge, narrow, and drill	10	May 12. Discharge, narrow, and drill
52	May 13		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 13. Discharge, narrow, and drill	10	May 13. Discharge, narrow, and drill
53	May 14		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 14. Discharge, narrow, and drill	10	May 14. Discharge, narrow, and drill
54	May 15		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 15. Discharge, narrow, and drill	10	May 15. Discharge, narrow, and drill
55	May 16		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 16. Discharge, narrow, and drill	10	May 16. Discharge, narrow, and drill
56	May 17		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 17. Discharge, narrow, and drill	10	May 17. Discharge, narrow, and drill
57	May 18		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 18. Discharge, narrow, and drill	10	May 18. Discharge, narrow, and drill
58	May 19		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 19. Discharge, narrow, and drill	10	May 19. Discharge, narrow, and drill
59	May 20		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 20. Discharge, narrow, and drill	10	May 20. Discharge, narrow, and drill
60	May 21		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 21. Discharge, narrow, and drill	10	May 21. Discharge, narrow, and drill
61	May 22		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 22. Discharge, narrow, and drill	10	May 22. Discharge, narrow, and drill
62	May 23		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 23. Discharge, narrow, and drill	10	May 23. Discharge, narrow, and drill
63	May 24		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 24. Discharge, narrow, and drill	10	May 24. Discharge, narrow, and drill
64	May 25		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 25. Discharge, narrow, and drill	10	May 25. Discharge, narrow, and drill
65	May 26		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 26. Discharge, narrow, and drill	10	May 26. Discharge, narrow, and drill
66	May 27		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 27. Discharge, narrow, and drill	10	May 27. Discharge, narrow, and drill
67	May 28		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 28. Discharge, narrow, and drill	10	May 28. Discharge, narrow, and drill
68	May 29		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 29. Discharge, narrow, and drill	10	May 29. Discharge, narrow, and drill
69	May 30		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 30. Discharge, narrow, and drill	10	May 30. Discharge, narrow, and drill
70	May 31		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 31. Discharge, narrow, and drill	10	May 31. Discharge, narrow, and drill
71	May 32		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 32. Discharge, narrow, and drill	10	May 32. Discharge, narrow, and drill
72	May 33		1,125	10	1.1	1.20	1.17	0.03	75	75	2,100	10	10:00	10:00	May 33. Discharge, narrow, and drill	10	May 33. Discharge, narrow, and drill

See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH July-Aug-Sept., 1941
SHEET 3 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
D - 2

PROJECT Bethany, Missouri

STORM No.	DATE	WATERSHED		RAINFALL						TEMPERATURE (degrees F)		RUNOFF				Rainfall Net (inches)	Crop Loss (bushels per acre)	CONDITION OF WATERSHED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		Number	Area (acres)	Gage No.	Time (hour)	Duration (minutes)	Amount (inches)	MAXIMUM INTENSITY			Maximum	Minimum	Flood (hour)	Amount (inches)	MAXIMUM RATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
								8 minutes (hours per day)	15 minutes (hours per day)	30 minutes (hours per day)					CUMULATIVE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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73	July 9	D-2	8.070				.05																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</

**See note on sheet 5

MONTH, Oct-Nov., 1941
SHEET 4 OF 5

Bothany, Missouri

See note on sheet 5

See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Nov-Dec., 1941

SHEET 5 OF 5 PAGES

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED D-2

PROJECT Beckman, Maryland

Storm No.	Date	WATERSHED		RAINFALL						TEMPERATURE (in ° F.)				RUN-OFF				RAINFALL MINUS (inches)	RPT LOSS (tons per acre)	CONDITION OF WATERSHED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		Number	Area (acres)	Gage No.	Begin (hour)	Duration (minutes)	Amount (inches)	MAXIMUM INTENSITY			Maximum Minimum (11)	Begin (hour)	Period (hour)	Amount (inches)	MAXIMUM RUN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
								8 minutes (duration per hour)	15 minutes (duration per hour)	30 minutes (duration per hour)					Run/15	Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
127	Nov. 19	D-2	8,020	6	6:25	105	.14	.06	.10	.36	67	40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

** The difference between the catch in the standard gauge use to determine the amounts of rainfall for a watershed, and the amount from the recorder on which intensities are based, is indicated by a plus or minus sign.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Monticello, Mo. Nov. 27 - May 1, 1942
Sheet 1 of 5

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project Peabody, Missouri

WATERSHED D-3

Storm No.	Date	WATERSHED		RAINFALL				EXPOSURE				RUNOFF				Runoff minus (loss per acre)	Comments or Watershed
		Number	Area (acres)	Gage No.	Depth (inches)	Duration (minutes)	Amount (inches)	Wind (m.p.h.)	Direction	Frequency (times per hour)	Maximum (inches)	Minimum (inches)	Depth (inches)	Amount (cubic feet)			
1	Jan. 1	D-3	4,485														
2	1-7																
3	1-11																
4	1-15																
5	1-17																
6	1-21																
7	2-1																
8	2-4																
9	2-6																
10	Feb. 10																
11	12-13																
12	13-14																
13	14-15																
14	15-16																
15	2-1																
16	Mar. 3																
17	5-6																
18	6-7																
19	9-10																
20	12-13																
21	14-15																
22	15-16																
23	Apr. 2																
24	3-4																
25	5-6																
26	8-9																
27	10-11																
28	12-13																
29	14-15																
30	16-17																
31	17-18																
32	19-20																
33	21-22																
34	23-24																
35	25-26																
36	27-28																
37	29-30																
38	31-1																
39	2-3																
40	4-5																
41	6-7																
42	8-9																
43	10-11																
44	12-13																
45	14-15																
46	16-17																
47	18-19																
48	20-21																
49	22-23																
50	24-25																

See note on page 15

Month May-June-July, 19 42
Sheet 2 OF 5 STATION

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project Bethany, Missouri

WATERSHED D-3

Storm No.	Date	Watershed		Rainfall						Temperature (Station 5)				Runoff				Harvest Normal (bushels)	Size Loss (bushels per acre)	Comments or Remarks
		Number	Area (acres)	Gage No.	Begin (hours)	Duration (minutes)	Amount (inches)	Maximum Intensity			Minimum	Begin (hours)	End (hours)	Amount (bushels)	Maximum Here 15 min. 1 hr. 24 hrs.					
								3 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)										
40	May 5	D-3	1,145		1:21P	1.1	1.32	.56	.29	75			No Runoff		14					
41	5				9:02P	.94	.77	.24	.19	77			No Runoff		01			May 9. 31 in. burrow, and plant corn. Corn check found on field.		
42	5-6				5:40P	.15	.60	.36	.29	77			No Runoff		28					
43	15				7:30P	.35	.72	.40	.24	81			No Runoff		01					
44	16				2:42A	.13	1.14	2.41	1.26	57		6:02A	.55	3,592	2,52A			Some gully in flack-		
45	20				6:57P	.39	1.14	.60	.43	87		7:23P	.91	.007	7:12P			fact.		
46	22					.02				62				.06				May 20. Corn 3 to 4 inches high. Harvested corn. Surface soil loose and dry.		
47	22				1:39P	1.04	1.14	.73	.55	63		6:01P	.25	.075	3:53P					
48	27					.02				85			No Runoff		.77					
49	27					.01				89			No Runoff		.04			May 26. Cultivate corn with rotary hoe.		
50	30					.02				89			No Runoff		.06					
51	31				11:10A	.52	1.92	1.90	.90	81		12:50P	.91	.045	11:59A					
52	31				9:15P	.75	.12	.12	.12	63		10:00P	.02	.093	10:02P					
53	June 1				10:25A	.26	1.01	.59	.26	82			No Runoff		.27					
54	1					.01				65			No Runoff		.15			Soil moist before rain.		
55	2				3:00P	.270	3.12	1.96	1.20	81		3:02P	.62	3.112	3:07P					
56	3				9:45A	.75	.24	.12	.10	72			No Runoff		.89					
57	6				3:20A	.60	.12	.12	.08	76		6:12P	.05	.210	6:12P			Area 36. Cultivate corn with rotary hoe. Corn 3 to 4 inches high. Surface soil loose and dry.		
58	6				5:25P	.12	1.01	.52	.32	66		7:00P	.05	1.001	10:07A					
59	8				2:10A	.96	1.68	.78	.54	75		9:40A	.11	1.001	10:07A					
60	8				2:10A	.53	.12	.16	.13	56			No Runoff		.22					
61	9				2:42A	.66	1.76	2.32	1.22	69		11:30A	1.12	3.523	2:05A			30 inches high. Surface soil loose and dry.		
62	10				2:42A	.70	1.26	.90	.61	60		8:00P	.47	1.001	1:07P					
63	13				3:00P	.39	.24	.12	.09	63			No Runoff		.09					
64	21				3:42A	.30	2.00	1.12	.69	90			No Runoff		.11					
65	30				9:45P	.75	.24	.12	.10	97			No Runoff		.26					
66	July 3				10:42P	.12	.24	.16	.10	52			No Runoff		.06					
67	2-3				11:30P	.60	.36	.24	.20	70			No Runoff		.26					
68	3					.02	.36	.24	.20	70			No Runoff		.06					
69	3					.02	.36	.24	.20	70			No Runoff		.06					
70	7					.02	.36	.24	.20	70			No Runoff		.06					
																		a Correction of -.02 omitted.		

*See note on sheet 5

Month July-Aug-Sept., 1942
 Sheet 3 of 5 Pages

PROJECT _____
Jethany, Missouri

**See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Oct-Nov. 1941

Property Botany, Miss-1

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

WATERSHED D-3

Station 4 on 5 miles

Storm No.	Date	Watershed		Rainfall		Maximum Intensity				Temperature (degrees F.)				Runoff				Remarks
		Number	Area (acres)	Gage No.	Bran (hour)	Duration (minutes)	Amount (inches)	4th (inches)	Maximum Intensity			Maximum	Minimum	Bran (hour)	Gaged (hour)	Amount (inches)	Maximum Rate (cfs)	Remarks
									8 minutes (ft. per hour)	15 minutes (ft. per hour)	30 minutes (ft. per hour)							
101	Oct. 2	D-3	1,084.05		9100A 40	75	.21		1.00	.40	.12	67	55	9123A 2	9100P	.12	.066	212LP
102	2				11130A 330		.35		.96	.86	.42							.051
							-.01											1.07
103	4						.07					70	58		No Runoff			.09
104	6				5100A 75		.13		.26	.24	.14	52			No Runoff			
105	6				112LP 25		.19		1.80	.71	.38			1130P	1155P	.01	.035	1132P
106	6				10117P 100		.76		3.12	1.76	1.12	55		10128P	12130A	.12	.681	10138P
							.03											.90
107	9				12129A 309		1.51		2.88	2.12	1.44	70	57	12147A	4100P	.50	.621	12157A
							.67		3.08	2.16	1.34	64	63	9130P	2100A	.40	1.260	9153P
108	13				9135P 23		.67					79	55		No Runoff			.78
109	16						-.03								No Runoff			.14
110	17				3100A 60		.11		.24	.16	.16	57	46		No Runoff			.04
111	19						.04					66	49		No Runoff			
112	20				2101A 115		.21		.96	.48	.36	73		2131A	3110A	.02	.075	2137A
113	20				8115P 12		.06		.48	.21	.12			8117P	9115P	.01	.012	9110P
114	20				10110P 25		.14		.60	.32	.28	58		10121P	11100P	.02	.093	10138P
115	21				2100A 30		.27		2.88	1.68	.76	79	61	2110A	4100A	.15	1.350	2115A
							.03											.43
116	22				1113A 20		.25		1.68	.80	.54	74		1152A	5100A	.07	.531	1156A
117	22						.02					61			No Runoff			.18
							.07								No Runoff			.14
118	26				12115A 310		.44		.60	.32	.24	71		12155A			.093	4117A
119	26				6135A 70		.16		.24	.24	.20				3130P	.20		
120	26						.04											.12
							-.01											
121	26						.06					54			No Runoff			.06
122	27						.05					65			No Runoff			.05
123	27						.06					47			No Runoff			.06
124	30, 31, 1/1				8130P 1080		1.82		.24	.24	.24	46	33	7115A	6100A	.40	.104	2110P
							.17											.183
																		Runoff began on 10/31 and ended on 11/1 from storm No. 124. Soil very wet at time of storm.
125	Nov. 4				7110A 125		.22		.24	.12	.12	58	35	S. B. W.		.02	---	.20
126	5						.05					53	35		No Runoff		---	.05
127	11				6125A 105		.11		.96	.40	.26	67	40	S. B. W.		.01	---	.10

**See note on sheet 5

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

MONTH Nov-Dec. 1941
SHEET 5 OF 5 SURF

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED D-3

Project Bethany, Missouri

Storm No.	Date	Watershed		Rainfall			Temperature			Runoff			Rainfall Vision	River Stage	Direction of Watershed
		Station	Area (Acres)	Amount (Inches)	Duration (minutes)	Event (Type)	Ques No.	Maximum (Fahrenheit)	Minimum (Fahrenheit)	Hydrograph (Inches per hour)	Hydrograph (Inches per hour)	Hydrograph (Inches per hour)	Amount (Inches)	Maximum (Inches)	Direction of Watershed
128	Nov. 12	D-3	4245	.13	300	2:00 PM	10	51	25	.02	.02	.02	.13	18	Snow
129	Nov. 13			.06				27	18				.06		Rain
130	Nov. 14			.04				63							
131	Nov. 22			.05	185	8:40 PM		52		.11	.11	.11			Rain
132	Nov. 23			.25	780	1:10 PM		54	31	.72	.72	.72	1.01	1.209	Rain turned to snow.
133	Nov. 25			.25				37	30	.08	.08	.08			
134	Nov. 26			.13				27	13	.20	.20	.20			
135	Nov. 27			.13				39	18						
1941 Total		D-3 4486		34.61						5.69			25.12	63.25	

** The difference between the catch in the standard gauge used to determine the amount of rainfall for a watershed, and the amount from the recorder on which information are based, is indicated by a plus or minus sign.

Amounts from average of standard gauge No. 2 and standard gauge No. 10.
Time, intensity, and duration from recording gauge No. 2.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month Jan-Feb-Mar-Apr. 1943
SHEET 1 OF 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED I-53 & I-1

PROJECT Bethany, Missouri

Storm No.	Date	WATERSHED		RAINFALL				TEMPERATURE			HOURS			Runoff (inches)	Runoff (cfs)	Remarks
		Number	Area (acres)	Amount (inches)	Duration (hr. min.)	Time of day	Intensity (inches per hour)	Maximum (inches)	Minimum (inches)	Mean (inches)	Ended (hour)	Amount (inches)	Maximum (inches)			
1	Jan. 1	1	5	12.00W	530	72	.72	.84	.30	.14	.30	14	14	12	12	1-53. Annual, on 1st - Levee area removed. Residue from 1940 crop some a lower water power in the spring.
2	Jan. 2	2	5	5:40P	320	32	.32	.24	.18	.14	.18	14	14	12	12	1-1. Fall plowed.
3	Jan. 6-7	3	5	6:30P	1200	64	.64	.12	.06	.12	.06	14	14	12	12	Strip A. C. 1/2 in. mow.
4	Jan. 12-13	4	5	1:10P	960	18	.18	.24	.08	.12	.08	14	14	12	12	Strip C. Residue of 1940 corn crop.
5	Jan. 16-17	5	5	9:00P	640	37	.37	.12	.08	.12	.08	14	14	12	12	Strip D. Permanent mow.
6	Jan. 21	6	5	3:30A	690	17	.17	.12	.08	.12	.08	14	14	12	12	Trace
7	Jan. 25-26	7	5	10:30A	840	22	.22	.12	.08	.12	.08	14	14	12	12	Trace
8	Feb. 12	8	5			.04	.04	.16	.16	.16	.16	14	14	12	12	Trace
9	Feb. 12	9	5			.12	.12	.16	.16	.16	.16	14	14	12	12	Trace
10	Feb. 12	10	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
11	Feb. 12	11	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
12	Feb. 12	12	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
13	Feb. 12	13	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
14	Feb. 12	14	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
15	Feb. 12	15	5			.10	.10	.16	.16	.16	.16	14	14	12	12	Trace
16	Mar. 3	16	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
17	Mar. 3	17	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
18	Mar. 3	18	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
19	Mar. 3	19	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
20	Mar. 3	20	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
21	Mar. 3	21	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
22	Mar. 3	22	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
23	Apr. 2	23	5			.02	.02	.16	.16	.16	.16	14	14	12	12	Trace
24	Apr. 2	24	5			.16	.16	.16	.16	.16	.16	14	14	12	12	Trace
25	Apr. 2	25	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
26	Apr. 2	26	5			.11	.11	.16	.16	.16	.16	14	14	12	12	Trace
27	Apr. 2	27	5			.03	.03	.16	.16	.16	.16	14	14	12	12	Trace
28	Apr. 2	28	5			.01	.01	.16	.16	.16	.16	14	14	12	12	Trace
29	Apr. 2	29	5			.02	.02	.16	.16	.16	.16	14	14	12	12	Trace
30	Apr. 2	30	5			.07	.07	.16	.16	.16	.16	14	14	12	12	Trace
31	Apr. 2	31	5			.32	.32	.16	.16	.16	.16	14	14	12	12	Trace
32	Apr. 2	32	5			.59	.59	.16	.16	.16	.16	14	14	12	12	Trace
33	Apr. 2	33	5			.59	.59	.16	.16	.16	.16	14	14	12	12	Trace
34	Apr. 2	34	5			.11	.11	.16	.16	.16	.16	14	14	12	12	Trace
35	Apr. 2	35	5			.36	.36	.16	.16	.16	.16	14	14	12	12	Trace

* S.D.M. 5-11 - Max measurement of total runoff

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED I-58 & IJ-1

Month May - June., 19 41
Sheet 2 OF 5 SHEETS

Project Pethany, Missouri

Storm No.	Date	Watershed		Rainfall				Transpiration (Gordon 2)				Runoff			Runoff Miles (100 mi)	Rate Loss (tons per acre)	Consumption of Watershed (tons per acre)
		Number	Area (acres)	Area No.	Begin (hour)	Duration (minutes)	Amount (inches)	Maximum Intensity		Transpiration		Amount (inches)	Factor	Heaven (inches)			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
34	May 1	1		5			.02										
35	May 2	1		5	6:40P	70	.17	.36	.20								
36	May 3	1		5	3:17P	6	.05	.20	.10								
37	May 4	1		5	5:04P	55	.09	.72	.15								
38	May 5	1		5			.06										
39	May 6	1		5	1:05P	6	.10	1.08	.10								
40	May 7	1		5			.10										
41	May 8	1		5	9:05P	105	.23	.77	.34								
42	May 9	1		5	5:40P	10	.08	.60	.32								
43	May 10	1		5	7:40P	35	.20	.72	.10								
44	May 11	1		5			.02										
45	May 12	1		5	2:45A	80	.09	5.04	2.75	1.58							
46	May 13	1		5	2:45A	85	.10	5.04	2.75	1.58							
47	May 14	1		5	6:57P	100	.23	1.56	.90	.58							
48	May 15	1		5	6:57P	100	.23	1.56	.90	.58							
49	May 16	1		5			.08										
50	May 17	1		5			.08										
51	May 18	1		5	1:20P	229	.80	.86	.72	.50							
52	May 19	1		5	2:45P	229	.80	.86	.72	.50							
53	May 20	1		5			.04										
54	May 21	1		5			.08										
55	May 22	1		5	11:00A	52	.57	2.24	.95	.80							
56	May 23	1		5	3:00P	75	.11	.10	.10	.10							
57	May 24	1		5	12:00P	10	.57	2.14	.90	.82							
58	May 25	1		5	9:45P	75	.83	.12	.12	.10							
59	May 26	1		5	10:00A	76	.23	1.02	.17	.46							
60	May 27	1		5			.01										
61	May 28	1		5	3:00P	270	1.40	3.72	2.40	1.40							
62	May 29	1		5	3:00P	270	1.40	3.72	2.40	1.40							
63	May 30	1		5	9:45A	75	.08	.12	.12	.08							
64	May 31	1		5	8:30A	60	.10	.12	.12	.08							
65	May 1	1		5	5:45P	142	.10	.96	.50	.30							
66	May 2	1		5	5:45P	142	.10	.96	.50	.30							
67	May 3	1		5	9:12A	90	.40	1.14	.74	.51							
68	May 4	1		5	1:00P	55	.08	.20	.20	.21							
69	May 5	1		5	1:42A	340	1.01	4.80	2.90	1.92							

5/10. 13-1. Strip A. Bare, narrow, and plant cover.
5/10 1-58. Surface soil moist. 20 to 16 in. high. Surface soil dry and packed.
5/11. 13-1. Strip A. Bare 2 to 7 in. high. Excellent stand. Surface soil loose and moist.
5/12. 13-1. Strip A. Clay and slightly 11 to 12 in. high. Surface soil and packed.
5/13. 13-1. Strip A. Clay 12 to 14 in. high. Surface soil and packed. 6 to 8 in. high. Surface soil and packed.
5/28 13-1. Strip A. Cultivated corn with very heavy loss.
6/4/41 13-1. Strip A. Bare 3 to 7 in. high. Soil moist.
6/16 13-1. Strip B. Clover and tim. 30 in. high. Soil moist.
6/17 13-1. Good stand. Surface soil moist. Clover and tim. 6 to 10 in. high.
6/17 13-1. Strip A. Cultivated corn.
6/18 13-1. Strip A. Bare 1 to 2 in. high. Not closer and tim.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month June-July-Aug-Sept., 1942

Project Bethany, Missouri

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

WATERSHEDS 1-5B & 1C-1

Sheet 3

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1942

Storm No.	Date	Watershed		Rainfall						Temperature (degrees F)			Humidity		Soil Loss (ton per acre)	Condition of Watershed		
		Number	Area (acres)	Gage No.	Hours (hours)	Duration (minutes)	Amount (inches)	Maximum Intensity			Maximum	Minimum	Percent	Amount (inches)				
								5 minutes (duration per hour)	15 minutes (duration per hour)	30 minutes (duration per hour)								
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
59	June 8	16-1	3,153	5	9:15A	90	.10	1.44	.74	.51	73	56	101	5A11:00A	No Runoff	.01	.80	6.21 in. Soil moist and firm on 10-11. Strip A. Corn 6 to 7 in. high. Soil moist and firm on 10-11. Strip A. Corn 6 to 7 in. high, starting to tassle.
60	6	16-1	2,143	5	1:00P	55	.08	.20	.13	.11	63	60	21	9A 9:15A	No Runoff	1.15	.201	Strip B. Second growth clover. Yield, 2.26 T/A.
61	7	16-1	2,228	5	1:02A	240	1.81	6.30	3.53	2.55	63	60	21	9A 9:15A	No Runoff	1.15	.201	Strip B. Second growth clover. Yield, 2.26 T/A.
62	7	16-1	3,112	5	2:10P	165	.75	1.24	.92	.70	63	60	21	9A 9:15A	No Runoff	1.15	.201	Strip B. Second growth clover. Yield, 2.26 T/A.
63	7	16-1	3,112	5	2:10P	165	.75	1.24	.92	.70	63	60	21	9A 9:15A	No Runoff	1.15	.201	Strip B. Second growth clover. Yield, 2.26 T/A.
64	13			5	3:15A	30	.10	.24	.12	.10	63	55	10		No Runoff	.10	.10	Strip B. Second growth clover. Yield, 2.26 T/A.
65	27			5			.11	Slow drizzle			90	68	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
66	30			5	9:45P	75	.41	.84	.52	.42	97	76	41		No Runoff	.41	.41	Strip B. Second growth clover. Yield, 2.26 T/A.
67	2-2			5	11:30P	66	.11	.24	.16	.12	80	59	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
68	3			5			.06				88	64	8		No Runoff	.06	.06	Strip B. Second growth clover. Yield, 2.26 T/A.
69	3			5			.06				88	64	8		No Runoff	.06	.06	Strip B. Second growth clover. Yield, 2.26 T/A.
70	7			5			.06				90	65	8		No Runoff	.06	.06	Strip B. Second growth clover. Yield, 2.26 T/A.
71	9			5	7:45P	74	.14	.60	.38	.16	92	65	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
72	9			5	2:02A	60	.09	.36	.16	.08	92	60	8		No Runoff	.06	.06	Strip B. Second growth clover. Yield, 2.26 T/A.
73	9			5			.06				92	65	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
74	10			5			.06				92	65	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
75	10			5			.06				92	65	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
76	10			5			.06				92	65	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
77	20			5	11:15P	15	.14	.72	.56	.28	95	71	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
78	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
79	20			5	7:45A	70	.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
80	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
81	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
82	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
83	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
84	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
85	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
86	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
87	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
88	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
89	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
90	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
91	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
92	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
93	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
94	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
95	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
96	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
97	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
98	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
99	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
100	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
101	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
102	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
103	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
104	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
105	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
106	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
107	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
108	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
109	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
110	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
111	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
112	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
113	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
114	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
115	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
116	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
117	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
118	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
119	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
120	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
121	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
122	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
123	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
124	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
125	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
126	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
127	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
128	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
129	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
130	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
131	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
132	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
133	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A.
134	20			5			.23	.49	.23	.27	91	70	11		No Runoff	.11	.11	Strip B. Second growth clover. Yield, 2.26 T/A

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month Sept-Oct., 1941

Sheet 4 of 5 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
WATERSHED 1-58 & 13-1

Product Bethany, Missouri

Storm No.	Date	WATERSHED		RAINFALL					TEMPERATURE (Degrees F.)		RIVER			Hardest Measured Rainfall (inches)	Condition of Watersheds
		Number	Area (acres)	Gage No.	Begin (hours)	Duration (minutes)	Amount (inches)	MAXIMUM TEMPERATURE		Minimum	Peak	Flooded (feet)	Annual (cubic feet)		
								At Station (inches per hour)	At Station (directions)						
99	Sept. 29			5	9:00A	270	.05	.96	.44	50	43	No Runoff	.05	1A	
100	29-30			5			.55			64	43	No Runoff	.12	1A	
101	Oct. 2	1-10	2,112	5	9:00A	40	.45	1.08	.44	67	55	None	.05		
102		1-10	2,112	5	11:00A	300	.94	.78	.44			None	.05		
103		2	2,128	5	9:00A	10	.25	1.08	.44	67	55	None	.05		
104		2	2,128	5	11:30A	350	.94	.72	.44			None	.05		
105				5			.09	.36	.24	70	58	No Runoff	.04		
106				5	5:00A	70	.11			82		No Runoff	.05		
107		1-58	2,112	5	1:25P	25	.17	1.68	.60			None	.17		
108		1-58	2,112	5	10:20P	87	.76	3.12	1.84			None	.17	Trace	
109		1-1	2,128	5	1:25P	25	.17	1.68	.60			None	.17		
110		1-1	2,112	5	10:40P	87	.76	3.12	1.84		55	.01	.15		
111		1-1	2,112	5	10:37A	312	1.54	2.76	1.80	70	57	10:50A 11:00A	.17		
112		1-1	2,108	5	10:37A	312	1.54	2.76	1.80			10:50A 10:55A	.07		
113		1-1	2,112	5	9:10P	22	.68	3.80	2.60	84	63	9:50P 10:30A	.05		
114		1-1	2,108	5	9:50P	22	.68	3.80	2.60			9:50P 10:30A	.05		
115		1-1	2,112	5	3:00A	60	.04	.24	.16	79	73	No Runoff	.04		
116		1-1	2,112	5			.05			79	73	No Runoff	.05		
117		1-1	2,112	5	9:00A	135	.30	1.08	.44	72		None	.05		
118		1-1	2,112	5	9:10P	10	.03	.24	.16			None	.04		
119		1-1	2,112	5	9:10P	20	.14	.70	.28	50		None	.05		
120		1-1	2,112	5	9:10P	20	.14	3.00	1.16	79	63	2:00A 6:00A	.05		
121		1-1	2,112	5	9:10P	135	.30	1.08	.44	73		None	.05		
122		1-1	2,112	5	9:10P	10	.08	.72	.28	50		None	.05		
123		1-1	2,112	5	10:15P	25	.60	.32	.28	73	63	2:00A 5:00A	.05		
124		1-1	2,112	5	2:10A	25	.40	3.00	1.16	73	63	2:00A 5:00A	.05		
125		1-1	2,112	5	1:45A	18	.24	1.68	.44	74		2:00A 5:00A	.05		
126		1-1	2,112	5	1:45A	18	.24	1.68	.44			2:00A 5:00A	.05		
127				5			.06			61		No Runoff	.06		
128		1-58	2,112	5	10:15A	690	.43	.48	.20	71		1:00P 2:00P	.07		
129		1-1	2,112	5	9:10P	20	.14	.72	.28			2:00A 5:00A	.05		
130		1-1	2,112	5	9:10P	20	.14	.72	.28			2:00A 5:00A	.05		
131		1-1	2,112	5	9:10P	20	.14	.72	.28			2:00A 5:00A	.05		
132		1-50	2,112	5			.04			54		None	.05		
133		1-1	2,112	5								None	.05		

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF RESEARCH

Month Oct-Nov-Dec, 1941,
Sheet 5 of 5 MEETS

RECORD OF SINGLE STORMS AND THEIR RUN-UPS ON VARIOUS WATERSHEDS
EXTENDED 1-58 & 14-1

Project Beckham, Missouri

Storm No.	Date	Watershed		Rainfall		Temperature (Degrees F.)			Runoff		Rainfall Status		Remarks
		Number	Area (Acres)	Amount (Inches)	Duration (Minutes)	Direction (Miles)	Qage No.	Begin (Hour)	End (Hour)	Peak (Hour)	Amount (Inches)	Ratio (Inches)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
121	Oct. 16												
122	Oct. 27												
123	Oct. 29												
124	Oct. 31-11/1	1-53	2,112		1,900		5	9:20P	1000				
124	30,31-11/1	10-1	2,128		1,920		5	8:30P	1920				
125	Nov. 1	1-52	2,112		1,25		5	7:40A	125				
125	1	10-1	2,128		1,25		5	7:40A	125				
126							5						
127							5	6:25A	105				
127							5	6:25A	105				
128							5	2:00P	360				
129	Dec. 11						5						
130							5						
131							5						
132							5						
133							5						
134							5						
135							5						
136							5						
137							5						
138							5						
139							5						
140							5						
141							5						
142							5						
143							5						
144							5						
145							5						
194	1941 Jan. 1-53	2,112											
194	1941 Jan. 1-53	2,128											

CONDITION OF WATERSHEDS

Nov. 25. Strip A.
Hunk oorn. Yield 11.8 Bu./A.

Soil almost saturated from
precipitation Nov. 25. Soil still wet
Nov. 26. Strip A.

Nov. 3. 11-2, 11-3, 11-4, 11-5.
Fall plow.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3. 11-2, 11-3, 11-4, 11-5.
Fall plow.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

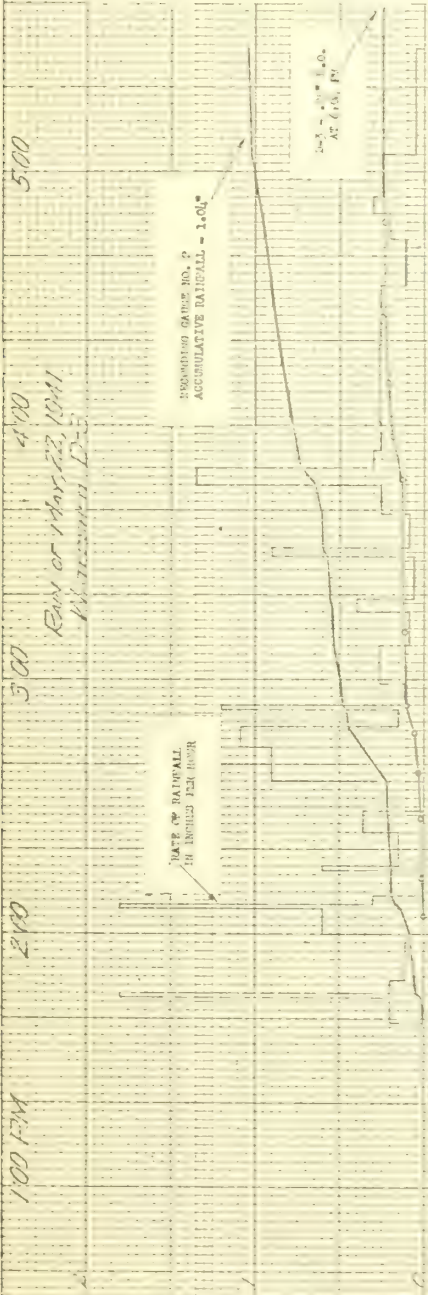
Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.

Nov. 3.



Area (acres)..... 14.05
 date begun..... 5/22
 duration (hours)..... 84 - 69
 Temperature (max. 6 min.).....
 Soil (major type)..... Shaly Loam
 percent of area..... 72.5
 Slope, average (percent)..... 6.7
 maximum.....
 Cover, type..... Corn
 height (ft.)..... 3 to 4 inches
 date last cultivated.....
 Soil loss (ton per acre)..... 1.06
 Remarks.....
 Surface soil loose and dry.

• AVE. OF STD. GAUGES NO. 2 & NO. 10
 APPLIES TO WATERSHED D-3

UNITED STATES DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 H. H. BENNETT, CHIEF

SHILBY LOAM AND RELATED SOILS EXPERIMENT STATION
 NEPTUNE, MISSOURI

STORM NO. 10
 Run by L. S. S. S. S. date 5/22/22
 Checked by L. S. S. S. date 5/22/22

WATERSHED SYMBOL	HYDROF. LBS.	MAX. RATE INQ/HOUR	SOIL LOSS T/A	WATERSHED SYMBOL	HYDROF. LBS.	MAX. RATE INQ/HOUR	SOIL LOSS T/A
PA-4	.02	.02	TRACE	D-1	.15	.137	.021
PA-5	.04	.02	.002	D-2	.17	.101	.027
PA-6	.05	.05	TRACE	D-3	.02	.023	.021

DATA FROM THE FOLLOWING FACTORS ARE NOT FACTORS DUE TO SMALL QUANTITIES AND LOW RATES OF RUNOFF.

3:00 PM 4:00 5:00 6:00 7:00

East of Univ. 2, 1041
Hammaker F-1, F-2, F-3, F-4, F-5

RATE OF RAINFALL
IN INCHES PER HOUR

RECORDING GAUGE NO. 4
ACCUMULATIVE RAINFALL - 3.43"

1A-A - 25" R.O. at 10:00 PM
1A-B - 25" R.O. at 11:15 PM
1A-C - 25" R.O. at 1:00 PM

RECEIVED	1A-A	1A-B	1A-C
Area (acres).....	34.06	34.06	34.06
Preceding rain (in.).....	6.1	6.1	6.1
duration (min).....	01 - 65	01 - 65	01 - 65
Temperature (max. & min.).....	Shady Loom	Shady Loom	Shady Loom
Foil factor type.....	95.6	95.5	94.7
Percent of area.....	11.0	11.0	11.0
Moisture, average (percent).....	100-grass	100-grass	100-grass
Cover, type.....	2 to 6 inches	2 to 6 inches	2 to 6 inches
height (ft.).....	2 to 6 inches	2 to 6 inches	2 to 6 inches
Date last cultivated.....	Turnover	Turnover	Turnover
Soil, name & class.....	Turnover	Turnover	Turnover
Source.....	Turnover	Turnover	Turnover

Barometer will moist before Storm No. 55. All specimens have been passed with results.

STORM NO. 55						
(1)	(2)	(3)	(4)	(5)	(6)	
TIME	TIME	TIME	TIME	TIME	TIME	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
10:00 AM	0	000	000	000	000	000
10:10	6	011	011	011	011	011
10:20	6	019	019	019	019	019
10:30	3	006	006	006	006	006
10:40	4	002	002	002	002	002
10:50	5	007	007	007	007	007
11:00	6	008	008	008	008	008
11:10	2	000	000	000	000	000
11:20	5	001	001	001	001	001
11:30	5	001	001	001	001	001
11:40	3	001	001	001	001	001
11:50	3	001	001	001	001	001
12:00	3	001	001	001	001	001
12:10	3	001	001	001	001	001
12:20	3	001	001	001	001	001
12:30	3	001	001	001	001	001
12:40	3	001	001	001	001	001
12:50	3	001	001	001	001	001
1:00	3	001	001	001	001	001
1:10	3	001	001	001	001	001
1:20	3	001	001	001	001	001
1:30	3	001	001	001	001	001
1:40	3	001	001	001	001	001
1:50	3	001	001	001	001	001
2:00	3	001	001	001	001	001
2:10	3	001	001	001	001	001
2:20	3	001	001	001	001	001
2:30	3	001	001	001	001	001
2:40	3	001	001	001	001	001
2:50	3	001	001	001	001	001
3:00	3	001	001	001	001	001
3:10	3	001	001	001	001	001
3:20	3	001	001	001	001	001
3:30	3	001	001	001	001	001
3:40	3	001	001	001	001	001
3:50	3	001	001	001	001	001
4:00	3	001	001	001	001	001
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4:30	3	001	001	001	001	001
4:40	3	001	001	001	001	001
4:50	3	001	001	001	001	001
5:00	3	001	001	001	001	001
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5:50	3	001	001	001	001	001
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6:40	3	001	001	001	001	001
6:50	3	001	001	001	001	001
7:00	3	001	001	001	001	001
7:10	3	001	001	001	001	001
7:20	3	001	001	001	001	001
7:30	3	001	001	001	001	001
7:40	3	001	001	001	001	001
7:50	3	001	001	001	001	001
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8:30	3	001	001	001	001	001
8:40	3	001	001	001	001	001
8:50	3	001	001	001	001	001
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7:40	3	001	001	001	001	001
7:50	3	001	001	001	001	001
8:00	3	001	001	001	001	001
8:10	3	001	001	001	001	001
8:20	3	0				

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ASTOR LENOX TILDEN FOUNDATION
1009 5th Ave. New York, N.Y. 10028

FD-1 JLO R.O. at 11:15 PM
10-1-68 R.O. at 12:00 PM

WATERED	1-1	1-2
Area (acres)	7.530	0.059
Fencing (m. lin.)	217	217
Date begun	6/1	6/1
Duration (hours)	—	—
Temperature (max. & min.)	81 - 65	81 - 65
Soil (major type)	Shelly Loam	Shelly Loam
Percent of area	100.0	79.0
Slope, average (percent)	6.5	7.0
Soil tests	—	—
Over, 1 ft.	Curn	Curn
Height (ft.)	24 to 12 inches	10 to 12 inches
Date last cultivated	5-87	5-17
Soil loss (tons per acre)	.143	.235
Remarks	—	—
Soil moist. (comp. 2 ft. and 5 ft.)	95	95

- 10% STD. NO. 6 + 60% STD. NO. 9
- APPLIES TO WATERCHES D-1
- 20% STD. NO. 2 + 80% STD. NO. 9
- APPLIES TO WATERCHES D-2

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

SOILS RELATED TO THE GREAT STATION

THE UNIVERSITY OF CHICAGO

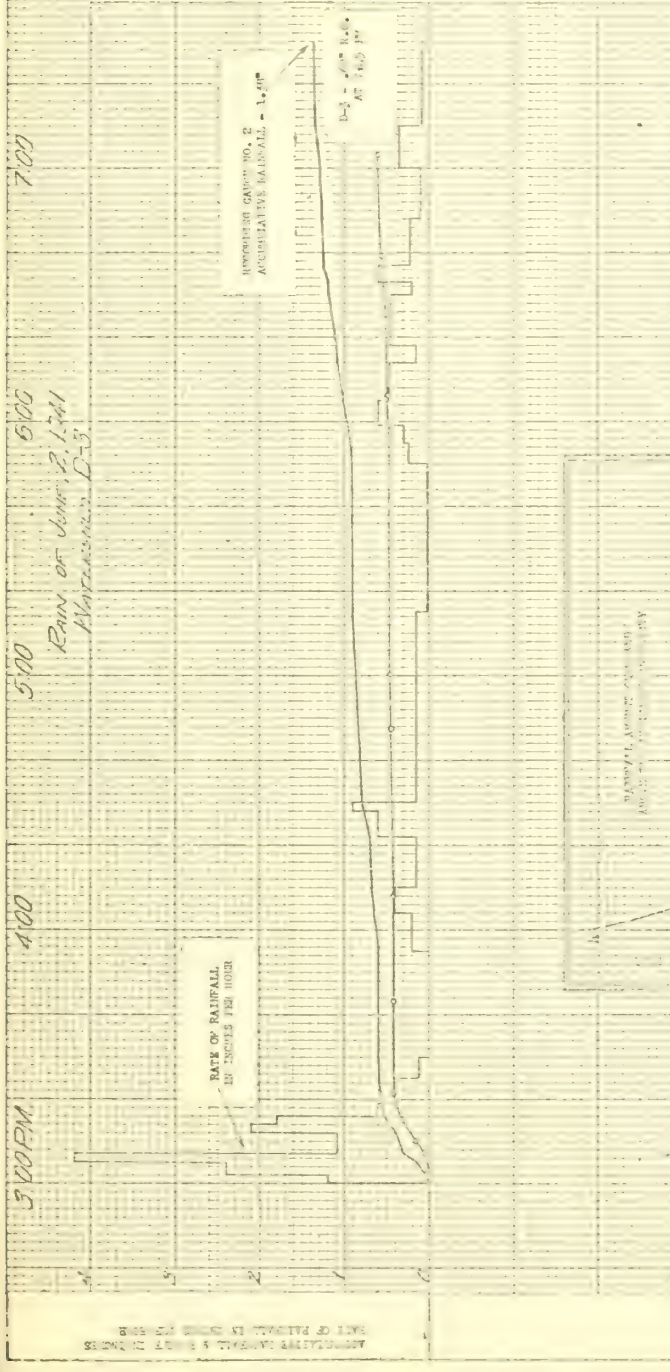
STORM NO. 55

Plot by L. V. Lillie date checked by A. V. Z. date
 Computations by L. F. M. date checked by A. V. Z. date

STORM NO. 55					
(1) TIME	(2) ALT	(3) DIR	(4) DIB	(5) DIB (in)	(6) DIB (in)
1:00 PM	0	0	0	0	0
1:05	2	0	0	0	0
1:10	3	0	0	0	0
1:15	4	0	0	0	0
1:20	5	0	0	0	0
1:25	6	0	0	0	0
1:30	7	0	0	0	0
1:35	8	0	0	0	0
1:40	9	0	0	0	0
1:45	10	0	0	0	0
1:50	11	0	0	0	0
1:55	12	0	0	0	0
2:00	13	0	0	0	0
2:05	14	0	0	0	0
2:10	15	0	0	0	0
2:15	16	0	0	0	0
2:20	17	0	0	0	0
2:25	18	0	0	0	0
2:30	19	0	0	0	0
2:35	20	0	0	0	0
2:40	21	0	0	0	0
2:45	22	0	0	0	0
2:50	23	0	0	0	0
2:55	24	0	0	0	0
3:00	25	0	0	0	0
3:05	26	0	0	0	0
3:10	27	0	0	0	0
3:15	28	0	0	0	0
3:20	29	0	0	0	0
3:25	30	0	0	0	0
3:30	31	0	0	0	0
3:35	32	0	0	0	0
3:40	33	0	0	0	0
3:45	34	0	0	0	0
3:50	35	0	0	0	0
3:55	36	0	0	0	0
4:00	37	0	0	0	0
4:05	38	0	0	0	0
4:10	39	0	0	0	0
4:15	40	0	0	0	0
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4:30	43	0	0	0	0
4:35	44	0	0	0	0
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4:55	48	0	0	0	0
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5:05	50	0	0	0	0
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5:15	52	0	0	0	0
5:20	53	0	0	0	0
5:25	54	0	0	0	0
5:30	55	0	0	0	0
5:35	56	0	0	0	0
5:40	57	0	0	0	0
5:45	58	0	0	0	0
5:50	59	0	0	0	0
5:55	60	0	0	0	0
6:00	61	0	0	0	0
6:05	62	0	0	0	0
6:10	63	0	0	0	0
6:15	64	0	0	0	0
6:20	65	0	0	0	0
6:25	66	0	0	0	0
6:30	67	0	0	0	0
6:35	68	0	0	0	0
6:40	69	0	0	0	0
6:45	70	0	0	0	0
6:50	71	0	0	0	0
6:55	72	0	0	0	0
7:00	73	0	0	0	0
7:05	74	0	0	0	0
7:10	75	0	0	0	0
7:15	76	0	0	0	0
7:20	77	0	0	0	0
7:25	78	0	0	0	0
7:30	79	0	0	0	0
7:35	80	0	0	0	0
7:40	81	0	0	0	0
7:45	82	0	0	0	0
7:50	83	0	0	0	0
7:55	84	0	0	0	0
8:00	85	0	0	0	0
8:05	86	0	0	0	0
8:10	87	0	0	0	0
8:15	88	0	0	0	0
8:20	89	0	0	0	0
8:25	90	0	0	0	0
8:30	91	0	0	0	0
8:35	92	0	0	0	0
8:40	93	0	0	0	0
8:45	94	0	0	0	0
8:50	95	0	0	0	0
8:55	96	0	0	0	0
9:00	97	0	0	0	0
9:05	98	0	0	0	0
9:10	99	0	0	0	0
9:15	100	0	0	0	0

• AVE. OF STD. GAUGES NO. 2 & NO. 10
APPLIES TO WATERSHED D-3

UNITED STATES OF AMERICA
DEPT. OF AGRICULTURE
BUREAU OF SOILS
STORM NO. 55
BRIDGES, MISSOURI
1931
Computed by J. D. M. de la
checked by A. P. de la



WATERSHED

Area (acres)..... 141/95

Preceding Rain (in.)..... 25

Date begun..... 6/2

Duration (hours)..... 01 - 65

Temperature (max. & min.)..... Shelby loam

Soil (major type)..... 75.5

Percent of area..... 6.7

Slope, average (percent).....

Soil type.....

Height (ft.)..... 20 - 25 inches

Date last cultivated..... 5/20

Soil loss (tons per acre)..... 0.9/2

Remarks.....

Station.....



5:00 PM

5:00 PM

5:00 PM

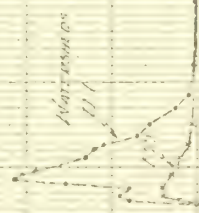
5:00 PM

RATE OF RAINFALL
IN INCHES PER HOUR

RECORDING GAUGE NO. 5
ACCUMULATIVE RAINFALL - 1.50"

1-50 - 100" R.O. AT 11:00 PM
10-1 - 125" R.O. AT 9:45 PM
Too small to report accum.

Area (in. sq.)	2.112	2.112	2.112
Preceding rain (in.)	.00	.00	.00
date began	8/1	8/1	8/1
duration (hours)	81 - 65	81 - 65	81 - 65
temperature (max. & min.)	81 - 65	81 - 65	81 - 65
Soil (major type)	Cherty Loam	Cherty Loam	Cherty Loam
Percent of area	91.3	91.3	91.3
Blow, average (percent)	9.1	9.1	9.1
rainfall	---	---	---
Cover, type	Oats & Leeks	Oats & Leeks	Oats & Leeks
height (ft.)	2 1/2' & 3' - 5'	2 1/2' & 3' - 5'	2 1/2' & 3' - 5'
date last cultivated	---	---	---
Soil loss (tons per acre)	.001	.001	.001
Remarks	Strip A - Corn, d to 10 inches high. C ₁ - test with a 10" probe. Strip B - Clover-streeply meadow. Strip C - Oats, 2 1/2' inches high. Excellent cover on strips B & C.		



7-50
10-1

STORM NO. 55

(1) TIME
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AUTS. FROM STD. GAUGE NO. 5
INTERESTS FROM REC. NO. 5
APPLIES TO RAINFALL 1-50 & 10-1

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. SPURTT, CHIEF

STUDY LOAN AND RESEARCH SOIL EXPERIMENT STATION

1911

STORM NO. 55

Plot by L.P. H. date checked by A.P. H. date
Cooperation by L.P. H. date checked by A.P. H. date

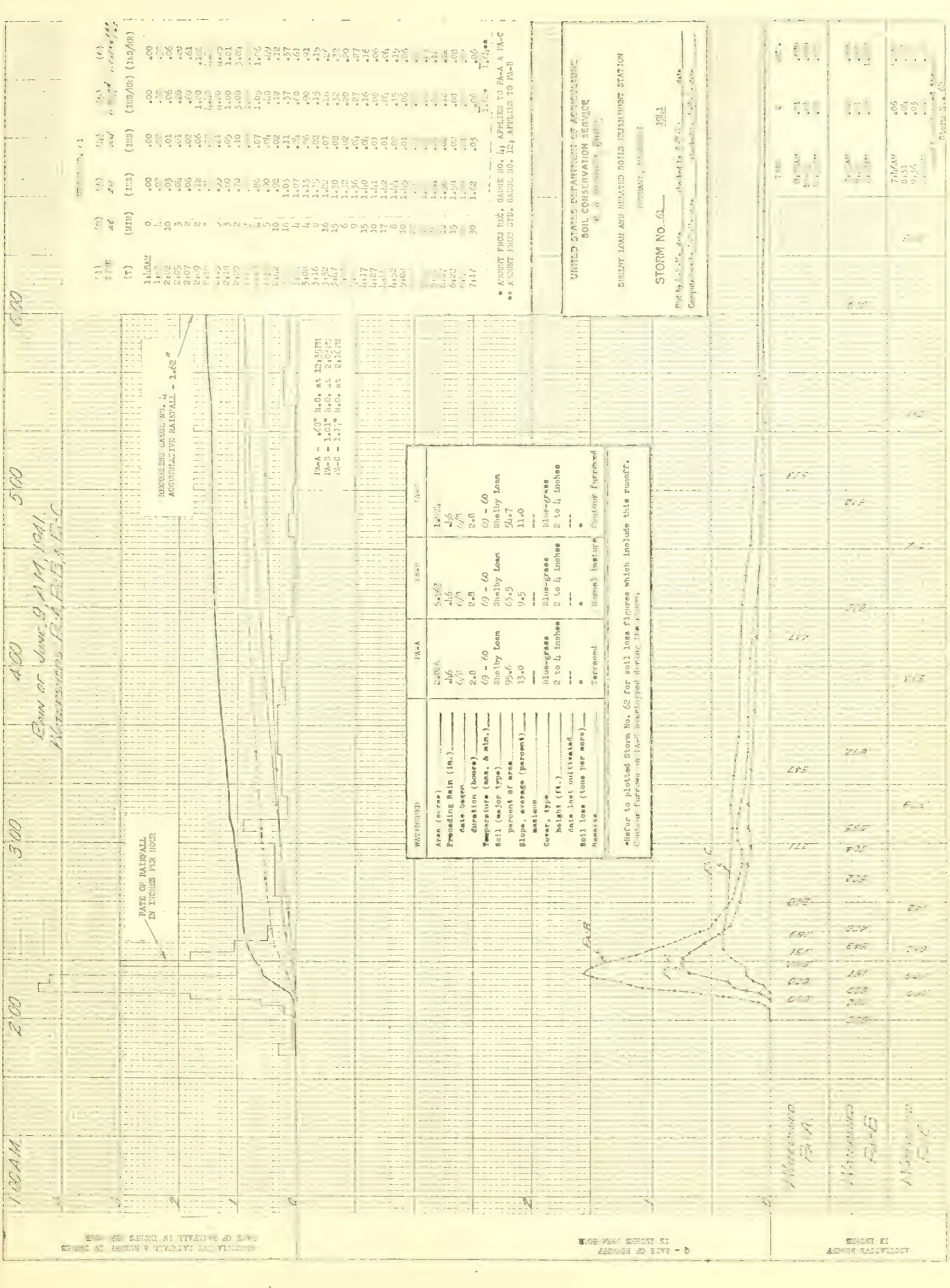


Table with multiple columns: (1) TIME, (2) RATE OF RAINFALL, (3) CUMULATIVE RAINFALL, (4) RUNOFF, (5) SOIL LOSS, (6) SOIL CONSERVATION SERVICE, (7) STORM NO., (8) DATE, (9) LOCATION, (10) PLANT, (11) SOIL, (12) FERTILIZER, (13) PESTICIDE, (14) OTHER.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
STORM NO. 62
DATE: 1961
LOCATION: ...
PLANT: ...
SOIL: ...
FERTILIZER: ...
PESTICIDE: ...
OTHER: ...

[illegible]

November
 7-1888

RECORDING TAPE NO. 5

[illegible]

of the watershed.

Strip A - Corn, 10 to 24 inches high.

Strip B - Meadow, trees and brushy.

Strip C - Oats, 24 to 30 inches high.

Strip D - Pasture, trees and brushy.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. BENNETT, CHIEF.

STORM NO. 61

1971

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notations by $L_{\infty}^{(n)}$	checked by $A_{\infty}^{(n)}$	den

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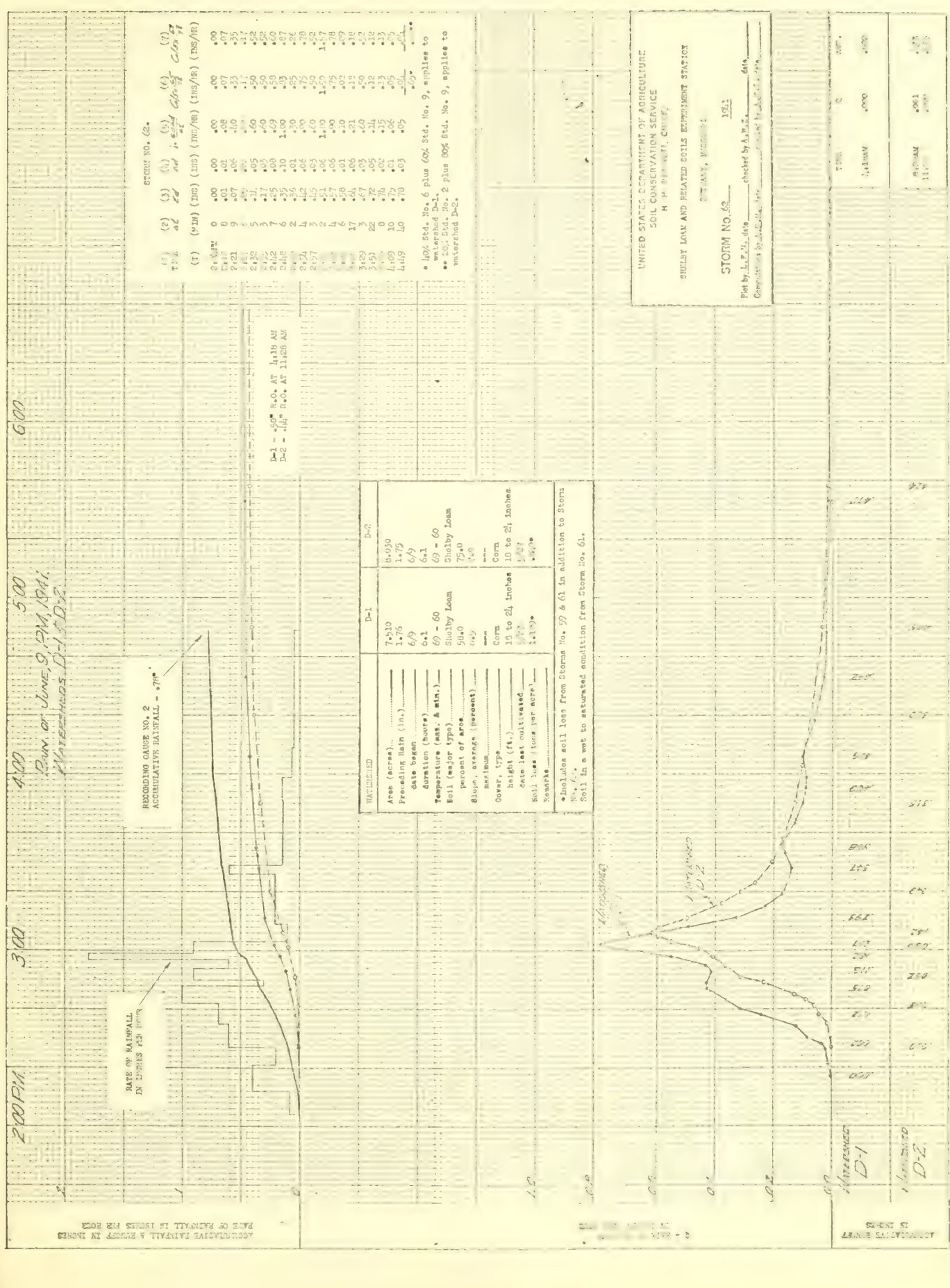
25

5.

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RECORDING GAUGE NO. 2
ACCUMULATIVE RAINFALL - 0.71"

DATE OF RAINFALL
IN INCHES PER HOUR

D-1 - 50" R.O. AT 11:10 AM
D-2 - 41" R.O. AT 11:20 AM

WATERED		D-1	D-2
Area (acres)...	7.210	6.030	6.030
Preceding rain (in.)...	1.76	1.75	1.75
Date begun	6/9	6/9	6/9
Duration (hours)	6.1	6.1	6.1
Temperature (air & soil)	69 - 60	69 - 60	69 - 60
Soil (major type)	Shaly Loam	Shaly Loam	Shaly Loam
Percent of area	50.0	75.0	75.0
Blue average (percent)	0.2	0.0	0.0
Barium	---	---	---
Over, type	Corn	Corn	Corn
Height (ft.)	10 to 24 inches	10 to 24 inches	10 to 24 inches
Date last cultivated	5/27	5/27	5/27
Soil loss (tons per acre)	3.15	3.15	3.15
Seeds	---	---	---

Shaly loam soil loss from Storm No. 59 & 61 in addition to Storm No. 61.
Soil in a wet to saturated condition from Storm No. 61.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. HARRIS, CHIEF

SHALY LOAM AND RELATED SOILS EXPERIMENT STATION
ST. ANGELO, TEXAS

STORM NO. 62

Plot by L. P. H. data checked by A. H. H. data
Corrected by A. H. H. data

DATE OF RAINFALL IN INCHES PER HOUR

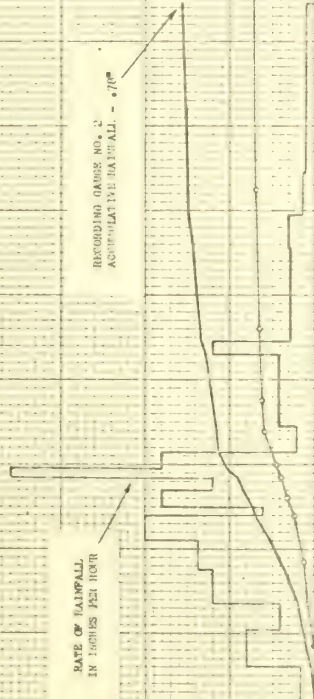
D-1
D-2



00:9

THE FOLLOWING INFORMATION IS FOR THE USE OF THE BUREAU OF INVESTIGATION:

RATE OF RAINFALL,
IN INCHES PER HOUR

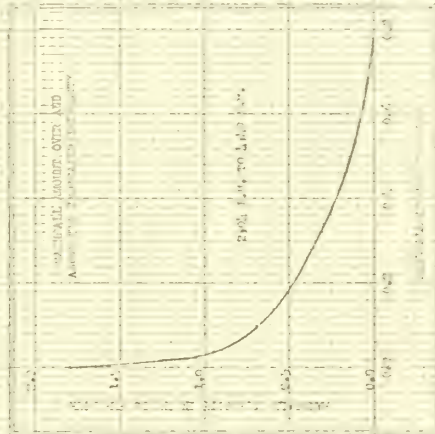
RECORDING GAUGE NO. 2
ACCUMULATIVE RAINFALL - .70"

D-3 - 27 K.O.
AT 8:30 PM

AT 8,30 PM

• AUBURN STION AVE., OF CAUGHS NO. 2 & 10
ACROSS TO WATCHED 1-3.

FROM THE SECRETARY OF
THE BOARD OF SUPERVISORS

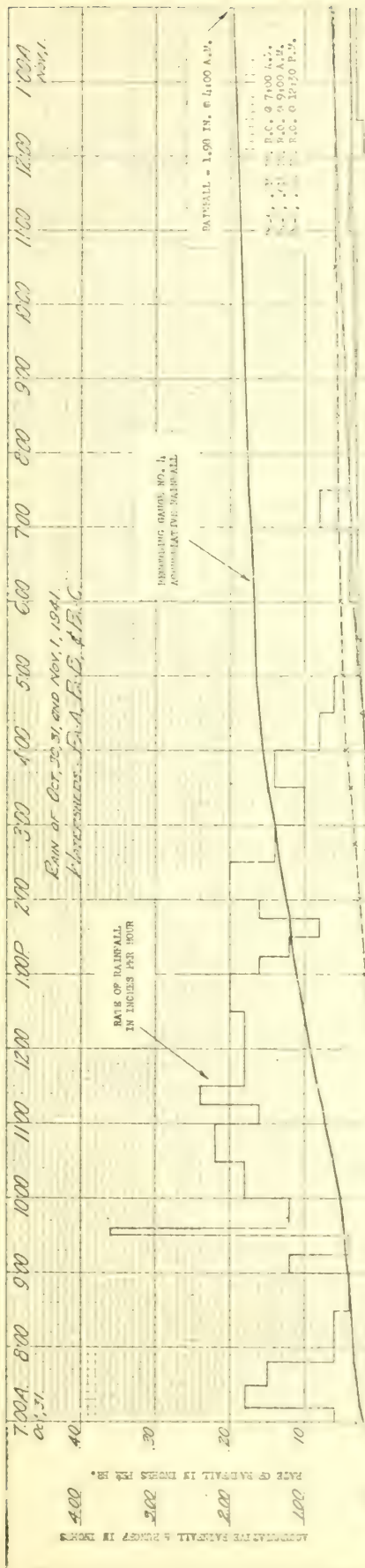


1871. D-5

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Acres (gross)	6.7
Bearing (in.)	1.0
Date begun	6/9
Duration (days)	6
Temperature (max. & min.)	69
" " " "	67
Slope, average (percent)	6.7
Gravim.	none
Cover, type	15 to 20 inches
Height (ft.)	5/28
Date last cultivated	
Yield (tons per acre)	2.25
Remarks	

STONY NO 2
RETURN, MICHIGAN
SHELBY LOAN AND RELATED BOLS INDEPENDENT STATION
SOIL CONSERVATION SERVICE
THE NATIONAL BUREAU



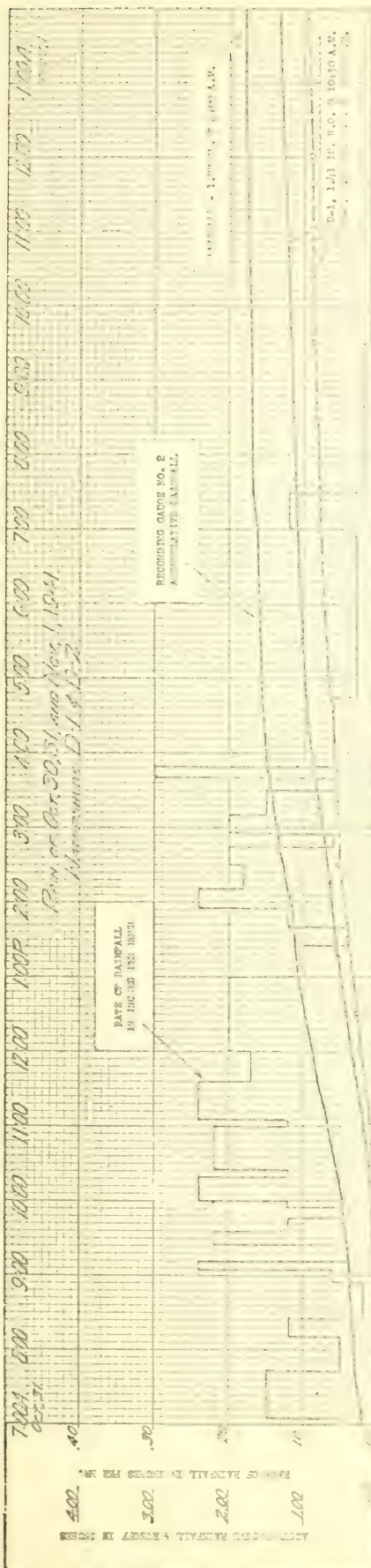
WATERFORD		In-A		In-B		In-C	
Area (acres)	2,026	5,543	1,574	5,543	1,574	5,543	1,574
Freezing rain (in.)	.06	.06	.06	.06	.06	.06	.06
date began	10/29	10/29	10/29	10/29	10/29	10/29	10/29
duration (hours)	---	---	---	---	---	---	---
Temperature (max. & min.)	16 - 33	16 - 33	16 - 33	16 - 33	16 - 33	16 - 33	16 - 33
Soil (major type)	Shaly loam	Shaly loam	Shaly loam	Shaly loam	Shaly loam	Shaly loam	Shaly loam
percent of area	95.6	95.6	95.6	95.6	95.6	95.6	95.6
Slope, average (percent)	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Cover, type	Bluegrass	Bluegrass	Bluegrass	Bluegrass	Bluegrass	Bluegrass	Bluegrass
height (ft.)	4 - 5 in.	4 - 5 in.	4 - 5 in.	4 - 5 in.	4 - 5 in.	4 - 5 in.	4 - 5 in.
Soil loss (tons per acre)	.000	.000	.000	.000	.000	.000	.000
Remarks	---	---	---	---	---	---	---

STORM NO. 124		STORM NO. 124		STORM NO. 124		STORM NO. 124	
(1) TIME	8:30 AM	(2) Δt	0	(3) Δt	0	(4) Δt	0
(5) Δt	0	(6) Δt	0	(7) Δt	0	(8) Δt	0
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(33) Δt	0	(34) Δt	0	(35) Δt	0	(36) Δt	0
(37) Δt	0	(38) Δt	0	(39) Δt	0	(40) Δt	0
(41) Δt	0	(42) Δt	0	(43) Δt	0	(44) Δt	0
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(81) Δt	0	(82) Δt	0	(83) Δt	0	(84) Δt	0
(85) Δt	0	(86) Δt	0	(87) Δt	0	(88) Δt	0
(89) Δt	0	(90) Δt	0	(91) Δt	0	(92) Δt	0
(93) Δt	0	(94) Δt	0	(95) Δt	0	(96) Δt	0
(97) Δt	0	(98) Δt	0	(99) Δt	0	(100) Δt	0

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. BENNETT, CHIEF

STORM NO. 124

Run by J.P. M. date checked by A.W. Z. date



STORM NO. 124		STORM NO. 124 (CONTINUED)	
Time	Intensity	Time	Intensity
7:00 AM	0.00	7:15	0.10
8:00 AM	0.00	8:00	0.25
9:00 AM	0.00	9:00	0.35
10:00 AM	0.00	10:00	0.40
11:00 AM	0.00	11:00	0.30
12:00 PM	0.00	12:00	0.20
1:00 PM	0.00	1:00	0.10

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. BENNETT, CHIEF

SHELBY LOAM AND RELATED SOILS EXPERIMENT STATION
BETHANY, MISSOURI

STORM NO. 124

Plot by Jan 15, 1944 checked by A.W.Z. date Jan 15, 1944
Comparison by Jan 15, 1944 checked by A.W.Z. date Jan 15, 1944



